## Jarrell, Noble

From:

1 - 1 m

Jiang, Dong

Sent:

Tuesday, February 28, 2006 11:52 AM

To: Subject:

Jarrell, Noble 10/616,788

Please search 1) SEQ ID NO:1 (nt)

2) SEQ ID NO:2 (aa) - standard & against nt

databases.

- issued & Pub.

- commercial

Please send results on paper to Dong Jiang in REM 4D70 (mail stop REM 4C70).

Thank you very much.

Dong

**Dong Jiang** 

AU1646 REM - 4D70 571-272-0872 Mail stop REM - 4C70

> 2 NA Noble 184 J. 312166 Ser Compage

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Result
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-Q=/abss/RBSSWEB spool/US10616788/runat 28022006 160435 14563/app_query.fasta 1
-Q=/abss/RBSSWEB spool/US10616788/runat 28022006 160435 14563/app_query.fasta 1
-DB=Published App_lications NA Main -QEWT=fastap -SUFFIX=rnpbm -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=blts -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=20 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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-NO MMAP -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV TIMEOUT=120
-NARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
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1: /cgn2_6/ptodata/1/pubpna/US07_2: /cgn2_6/ptodata/1/pubpna/US09A_3: /cgn2_6/ptodata/1/pubpna/US09A_4: /cgn2_6/ptodata/1/pubpna/US10A_6: /cgn2_6/ptodata/1/pubpna/US10B_6: /cgn2_6/ptodata/1/pubpna/US10B_7: /cgn2_6/ptodata/1/pubpna/US10B_7: /cgn2_6/ptodata/1/pubpna/US10B_9: /cgn
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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/cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US098_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
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                                                                                                                                                                                                                                                                                                                    Length
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US-09-809-567-1
US-10-216-156-1
US-10-616-788-1
US-10-842-006-3
US-10-717-282-7
US-10-842-006-1 5/\(\nu\)
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4839.652 Million cell updates/sec
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	-10-207-655-10	-09-925-065A-67236	-09-925-065A-50991	-09-925-065A-5099	-09-918-995-2642	-10-616-788-1	-10-717-282-1	-09-912-157-1	-10-717-282-	-09-912-157-	-10-717-282-	-09-912-157-	-10-717-282-	-09-912-157-	-10-302-172-12	-10-717-282-1	-09-912-157-1	-10-477-714-4	-10-408-385-1	-10-458-442-1	-10-410-552-1	-10-410-374-1	-10-410-927-1	-10-000-157-1	-09-908-827-1	-09-747-259-1	-09-874-503-1	-10-608-449-	-10-104-047-142	-10-924-667-9ン	-10-749-144-9 {	-09-863-818A-97	-10-343-348-1	-10-717-282-	-09-912-157-	-10-717-282-	-09-912-157-1-7/0	-10-608-449-1 05
	equence 106,	equence 67236	equence 50991,	equence 50990,	equence 264;	equence 18,	equence 13,	equence 13,	equence 6,	equence 6,	23, Appl	: 3, Appl	9,	9	125	¥ 11,	11,	equence 42, App	equence 17, App	17,	equence 17,	equence 17,	equence 17,	equence 3, Apr	equence 14:	equence 9.	equence 9,	equence 9,	equence 15,	equence 4,	equence 4,	equence 1,	equence 1,	equence 1,				

## ALIGNMENTS

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US-09-809-567-1
US-09-809-567-1
Sequence 1, Application US/09809567
Patent No. US20020045213A1
GENERAL INFORMATION:
APPLICANT: Jing, Shuqian
TITLE OF INVENTION: IL-17 Receptor Like Molecules and Uses Thereof
TITLE ROF INVENTION IL-17 Receptor Like Molecules and Uses Thereof
PILL REFERENCE: 01017/36916A
CURRENT APPLICATION NUMBER: US/09/809,567
CURRENT FILING DATE: 2001-03-15
PRIOR PILING DATE: 2000-11-28
PRIOR PILING DATE: 2000-03-16
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 3083
TYPE: DNA
CORGANISM: Homo sapiens
PEATURE:
NAME/KEY: CDS
LOCATION: (22)..(2235)
US-09-809-567-1
Alignment Scores:
Pred. No.:
SCORE:
SCORE
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21 CysargLysLysGlnGlnGluAsnIleTyrSerHisLeuAspGluGluSerSerGluSer 3		261 GlnAsnValSerProGlyAspTyrIleIleGluLeuValAspAspThrAsnThrThrArg 280	241 ProPheLy8ArgLy8ThrCy8Ly8GlnGluGlnThrThrGluThrThrSerCy8LeuLeu 260 	221 AlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly 240 	201 LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis 220 	181 ArgThrArgAlaCysAspLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp 200 	161 VallyaValValProPheProSerIleLyaAsnGluSerAsnTyrHisProPhePhePhe 180 	141 LysargThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPhe 160 	121 GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe 140 	101 GlyAlaLeuGlyIleGluPheLeuLy8GlyPheArgValIleLeuGluGluLeuLy8Ser 120 	81 IleThrIleSerGlnTyrAlaCysHisAspGlnValAlaValThrIleLeuTrpSerPro 100 	61 AspAsnCysThrThrTyrLeuAsnProValGlyLysHisVallleAlaAspAlaGlnAsn 80 	41 TrpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLysTyr 60 	21 SerGlnLeuAlaValAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThrCyBGly 40 	1 MetAlaProTrpLeuGlnLeuCysSerValPhePheThrValAsnAlaCysLeuAsnGly 20 	3 Gaps: 0 16-788-2 (1-738) x US-09-809-567-1 (1-3083)
Q	\$ Q \$	δ β ξ	y dd Q	D 99							) B &	gb 45	S B &	D 5	B &	? B
681 GlyLeuSerThrAspGlnThrGluThrSerSerLeuThrGluSerValSerSerSerSer	1942 GCGGCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGCAGCCCCTCGGACATGCCGGGGGGGG	641 AlaAlaLeuGInProLeuHisThrValLysAlaGlySerProSerAspMetProArg 660	601 PhecygleubysvalidiuAlaprovalieuglyalininglyproalaaspsercinnis 520	581 LyseheAspSerGLyLeuValLeuAsnAspValMeCCysLyserGGJuserAsp 600	561 GlulysGunPheValProPheHis 	541 SerLeuTyrValALaIIeCyeAsn	521 Progrydinhis/inragglingil	SOI MetAspashLeurrodInLeucysSerHisLeuhisSerargaspHisGIyLeUGInGin Szo	1462 GATTATTCCTGCGAGGGAGACGT	461 Leunsgeinntalygeinserserstatalateuserbyskreitertavattyrke 400 1402 CTCCGCCAGGCCAGCAGGTTCGTCCGCCGCGCCTCAGCAAGTTTATCGCCGTCTACTTT 146:	441 GJYATGGJYSETGJYLYBGJYGJUHEUPNELEUVALLAVWIJSETALAILEALAGIHLYB 	421 VALLYBSELLYBSLYMELLYSIYERIGVALABDISHYBDISHBIJYEDIYBSIYSSIYSIY 110	401 ArgGluGlyGlhArgGluTpVallleGlnLysILH18GluSerGlnPhellelleVallle AngoluGlyGlhArgGluTpVallleGlnLysILH18GluSerGlnPhellelleVallle AngoluGluGlyGlnPhellelleVallleVallleVallleVallleVallleVallleVallleVallleVallleVallleVallleVallleValluGluGluGluGluGluGluGluGluGluGluGluGluG	1162 CTCCAGGACTTCTGTGGCTGTGAGGTGGCTCTGGACCTGTGGGAAGACTTCAGCCTCTGT 122	102 TGCTATTCCAGTAAAGATGGCCAGAATCACATGAATGTCCAGTGTTTCGCCTACTTC 116:	

9y 81 IleThrIleSerGlnTyrAlaCysHisAspGlnValAlaValThrIleLeuTrpSerPro 100	Qy 41 TrpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLysTyr 60	Oy  1 MetalaProTrpLeuGlnLeuCy8SerValPhePheThrValAsnAlaCy8LeuAsnGly 20	Pred. No.:       0       Length:       3083         Score:       3948.00       Matches:       738         Percent Similarity:       100.0%       Conservative:       0         Best Local Similarity:       100.0%       Mismatches:       0         Query Match:       100.0%       Mismatches:       0         DB:       100.0%       Gaps:       0         US-10-616-788-2 (1-738)       x US-10-216-156-1 (1-3083)	; TYPE: DNA ; ORGANISM: Homo sapiens ; FEATURE: ; NAME/KEY: CDS ; LOCATION: (22)(2235) US-10-216-156-1 Alignment Scores:	; PRIOR FILING DATE: 2000-11-28 ; PRIOR APPLICATION NUMBER: 60/189,816 ; PRIOR FILING DATE: 2000-03-16 ; NUMBER OF SEQ ID NOS: 17 ; SOFTWARE: Patentin Ver. 2.0 ; SEQ ID NO 1 ; SEQ ID NO 1	CURRENT APPLICATION NUMBER: US/10/216,156 ; CURRENT FILING DATE: 2002-08-08 ; PRIOR APPLICATION NUMBER: US/09/809,567 ; PRIOR FILING DATE: 2001-03-15 ; PRIOR APPLICATION NUMBER: 09/724,460		The state of the s	2122 GGCCTGGGTGAGGAGGAACCTCCTGCCCTTCCTTCCAAGCTCCTCTCTTCTGGGT
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Sequence 1, Application US/10616788
; Sequence 1, Application WS/20040048338A1
; Publication No. US/20040048338A1
; GENERAL INFORMATION:
    APPLICANT: Jing, Shuqian
    TITLE OF INVENTION: IL-17 Receptor Like Molecules and
    FILE REFERENCE: 01017/39525
; CURRENT APPLICATION NUMBER: US/10/616,788
; CURRENT FILING DATE: 2003-07-10
PRIOR APPLICATION NUMBER: 09/809,567
PRIOR APPLICATION NUMBER: 09/724,460
PRIOR APPLICATION NUMBER: 09/724,460
PRIOR APPLICATION NUMBER: 60/189,816
PRIOR APPLICATION NUMBER: 60/189,816
PRIOR APPLICATION NUMBER: 60/189,816
PRIOR FILING DATE: 2000-03-16
; NUMBER OF SEQ ID NOS: 19
SOFTWARE: PATENTIN 2000-03-16
; NUMBER OF SEQ ID NOS: 19
SOFTWARE: PATENTIN Ver. 2.0
; SEQ ID NO 1
; LENGTH: 3083
TYPE: DNA
; ONGANISM: Homo sapiens
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Publication No. US20040235104A1
GENERAL INFORMATION:
APPLICANT: Yang, Ruey-Bing
TITLE OF INVENTION: A Novel Human SEF Molecule and
TITLE OF INVENTION: Therefor
FILE REFERENCE: MPT03-071P1RM
CURRENT APPLICATION NUMBER: US/10/842,006
CURRENT FILING DATE: 2004-05-07
PRIOR APPLICATION NUMBER: 60/469522
PRIOR FILING DATE: 2003-05-08
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                                                                                                                              GlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSer
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                       GAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGAAGCAGCTCAACAGTAGCTTC
                                                                                                      GGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGCTGAAGTCG
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                                                   AspTyrSerCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeu 500
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                                                                                                                                                               GGCCGAGGCTCGGGGAAAGGAGCTCTTCCTGGTGGCGGTGTCAGCCATTGCCGAAAAG
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                               GATTATTCCTGCGAGGGAGACGTCCCCGGTATCCTAGACCTGAGTACCAAGTACAGACTC 1521
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                                                                                                           FILE REFERENCE: 00-49
CURRENT APPLICATION NUMBER: US/09/912,157
CURRENT FILING DATE: 2001-07-23
CUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 7
SEQ ID NO 7
LENGTH: 2341
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
Alignment Scores:
Pred. No.:
Score:
                                                               ; NAME/KEY: CDS
; LOCATION: (86
US-09-912-157-7
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Patent No. US20020165348A1
GENERAL INFORMATION:
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APPLICANT: Kuestner, Rolf
APPLICANT: Gao, Zeren
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Length: Matches:

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                                                                                               AlaAlaLeuGlnProLeuLeuHisThrValLysAlaGlySerProSerAspMetProArg
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Percent Similarity:
Best Local Similarity:
Query Match:
DB:
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APPLICANT: Kuestner, Rolf E.
APPLICANT: Kuestner, Rolf E.
APPLICANT: Gao, Zeren
TITLE OF INVENTION: Human Cytokine Receptor
FILE REFERENCE: 00-49
CURRENT APPLICATION NUMBER: US/10/717,282
CURRENT FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US/09/912,157
PRIOR APPLICATION NUMBER: US/09/912,157
PRIOR FILING DATE: 2001-07-24
NUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 7
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Publication No. US20040077052A1
GENERAL INFORMATION:
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ORGANISM: Homo
FEATURE:
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LOCATION: (86)...
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                                         GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe
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                                                       AspTyrSerCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeu
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US-10-842-006-1

US-10-842-006-1

Sequence 1, Application US/10842006

Publication No. US20040235104A1

GENERAL INFORMATION:

APPLICANT: Yang, Ruey-Bing

ITILE OF INVENTION: A Novel Human SEF Molecule and TITLE OF INVENTION: Therefor

FILE REFERENCE: MPI03-071PIRM

CURRENT APPLICATION NUMBER: US/10/842,006

CURRENT FILING DATE: 2004-05-07

PRIOR APPLICATION NUMBER: 60/469522

PRIOR PILING DATE: 2003-05-08

NUMBER OF SEQ ID NOS: 12

SCOTMARE: PastSEQ for Windows Version 4.0
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Pred. No.:
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                                            GTGGCCATCACAGTGCCACTGGTAGTCATATCGGCATTCGCGACGCTCTTCACTGTGATG
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; LENGTH: 4477
; TYPE: DNA
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US-10-608-449-1
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Best Local Similarity:
Query Match:
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Publication No. US20040265834A1
GENERAL INFORMATION:
APPLICANT: Tsinghua University
TITLE OF INVENTION: Human Interleukin-17 Receptor Like Molecule
FILE REFERENCE: I2003269C-US
CURRENT APPLICATION NUMBER: US/10/608,449
CURRENT FILING DATE: 2003-06-30
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
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                                ProGlyGlnHisThrargGlnGlySerArgArgAsnTyrPheArgSerLysSerGlyArg
                                                                                                   AspTyrSerCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeu
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APPLICANT: Presnell, Scott R.
APPLICANT: Kuestner, Rolf E.
APPLICANT: Goo, Zeren
TITLE OF INVENTION: Human Cytokine Receptor
FILE REFERENCE: 00-49
CURRENT APPLICATION NUMBER: US/09/912,157
CURRENT FILING DATE: 2001-07-23
NUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1
LENGTH: 2383
                                    Percent Similarity:
Best Local Similarity:
Query Match:
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Pred. No.:
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US-09-912-157-1
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                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sap
FEATURE:
NAME/KEY: CDS
LOCATION: (86)...(
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LENGTH: 2383
TYPE: DNA
ORGANISM: Homo sapiens
PEATURE:
NAME/KEY: CDS
LOCATION: (86)...(2344)
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APPLICANT: Kuestner, Rolf E.
APPLICANT: Gao, Zeren
TITLE OP INVENTION: Human Cytokine Receptor
FILE REPERENCE: 00-49
CURRENT APPLICATION NUMBER: US/10/717,282
CURRENT FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US/09/912,157
PRIOR FILING DATE: 2001-07-24
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SOFTWARE: FastSEQ for Windows Version 3.0
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                            CAACTGATTCTAAAGGATCCGAAGCAGCTCAACAGTAGCTTCAAAAGAACTGGAATGGAA
                                             GlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPheLysArgThrGlyMetGlu 146
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                                         AspValProGlyIleLeuAspLeuSerThrLysTyrArgLeuMetAspAsnLeuProGln 506
                                                                                                            SerSerSerAlaAlaLeuSerLysPheIleAlaValTyrPheAspTyrSerCysGluGly
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CURRENT APPLICATION NUMBER: US/09/912,157  CURRENT PILING DATE: 2001-07-23  NUMBER OF SEQ ID NOS: 13  SOFTWARE: PASTSEQ for Windows Version 3.0  SEQ ID NO 4  LENGTH: 2383  TYPE: DNA  ORGANISM: Homo Sapiens FEATURE: FEATURE: LOCATION: (86)(2344)  US-09-912-157-4  Alignment Scores: Pred. No.: Score: 3891.00 Matches: 732  Percent Similarity: 97.5% Conservative: 1	727 ArgerTyr	2126 TCGTCTGTGCCCTCATCCGAGCTGTCTCTGCCACTGATGGAAGGACTCTCGACGACCAG 21 687 ThrGluThrSerSerLeuThrGluSerValSerSerSerSerGlyLeuGlyGluGluGlu 70	Qy 607 AlaProValLeuGlyAlaThrGlyProAlaAspSerGlnHisGluSerGlnHisGlyGly 626	Db 1646 CTCTGTTCCCACTTGCACTCCCGAGACCACGGCCTCCAGGAGCCGGGCAGCACGCGA 1705  Qy 527 GlnGlySerArgArgArgArgTyrPheArgSerLysSerGlyArgSerLeuTyrValAlaIIle 546
Db 806 TICCGTTTCTTCTACTACTACAAGCTCAAGCACGAAGGACCTTTCAAGCGAAAGACCAAGAAGCCAAGAAGCCAAGAAGACCAAGAAG	Oy  167 ProSerIlely BABROLUSERARITY HIS PROPHE PHEAR GINAR GALACY BAS PHONG AND	446 127 506 147	Qy 47 AlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLysTyrAspAsnCysThrThrTyr	Best Local Similarity: 97.3% Mismatches: 5 Query Match: 98.6% Indels: 14 DB: 14 DB: 14 DB: 157-4 (1-2383)  Oy 1 MetalaProTTpLeuGlnLeuCysSerValPhePheThrValAsnAlaCysLeuAsnGly Db 86 ATGGCCCCGTGGCTGCAGCTCTGCTCCGTCTTTACGGTCAACGCCTCAACGGC  Oy 21 SerGlnLeuAlaValAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThrCysGly Db 146 TCGCAGCTGGCTGTGGCCGGTCCGGCCGGGGGGGGGGGG

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APPLICANT: Presnell, Scott R.
APPLICANT: Kuestner, Rolf E.
APPLICANT: Kuestner, Rolf E.
APPLICANT: Gao, Zeren
ITILE OF INVENTION: Human Cytokine Receptor
FILE REFERENCE: 00-49
CURRENT APPLICATION NUMBER: US/10/717,282
CURRENT FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US/09/912,157
PRIOR FILING DATE: 2001-07-24
NUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 4
LENGTH: 2383
TYPE: DNA
ORGANISM: Homo sapiens
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Best Local Similarity:
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Pred. No.:
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NAME/KEY: CDS
LOCATION: (86)...
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                                    LysTyrPheValAspLysAysAsmTyrLysHisLysGlyGlyGlyArgGlySerGlyLys 446
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APPLICANT: Edmonds, Brian
APPLICANT: Micanovic, Radmila
APPLICANT: Ou, Weijia
APPLICANT: Su, Eric
APPLICANT: Tschang, Sheng-Hung
APPLICANT: Tschang, Sheng-Hung
APPLICANT: Wang, He
TITLE OF INVENTION: NO. US20040038242A1el see
FILE REFERENCE: X-14001
CURRENT APPLICATION NUMBER: US/10/343,348
CURRENT FILING DATE: 2003-01-29
NUMBER OF SEQ ID NOS: 38
SOFTWARE: Patentin version 3.1
SEQ ID NO 15
LENGTH: 4392
TYPE: DNA
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FEATURE:
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                                                                                         LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis
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nHisGluSerGlnHisGlyGlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGl 639
                                                             GGAGAAATTTGATTCGGGCTTGGTTTTTAAATGATGTCATGTGCAAACCAGGGCCTGAGAG
                                                                         uGluLysPheAspSerGlyLeuValLeuAsnAspValMetCysLysProGlyProGluSe
                                                                                                               pPheGluLysGlnPheValProPheHisProProProLeuArgTyrArgGluProValLe
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                      TGACTTCTGCCTAAAGGTAGAGGCGGCTGTTCTTGGGGCAACCGGACCAGCCGACTCCCA
                                  rAspPheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerGl
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Pred. No.: 0 Length: 2786	818A-9 Scores:	NAME/KEY: misc feature LOCATION: (519)(519) OTHER INFORMATION: unknown	LOCATION:	NAME/KEY: misc feature LOCATION: (442)(442) OTHER INFORMATION: unknown	OTHER INFORMATION: unknown amino NAME/KEY: misc feature LOCATION: (194)(194) OTHER INFORMATION: unknown amino	LOCATION: (144).(144) OTHER INFORMATION: unknown amino NAME/KEY: misc feature LOCATION: (170)		OTHER INFORMATION NAME/KEY: mat per LOCATION: (118).	OGGANISM: Homo sapiens ; OGGANISM: Homo sapiens ; FEATURE: ; NAME/KEY: CDS ; NAME/KEY: CDS	SOFTWARE: Patentl SEQ ID NO 9 LENGTH: 2786	CURRENT FILING DATE: 2001-05 PRIOR APPLICATION NUMBER: US PRIOR FILING DATE: 2000-05-0 NUMBER OF SEO ID NOS: 22	APPLICANT: GOTMAIN. Daniel M.  TITLE OF INVENTION: MAMMALIAN RECEPTOR PROTEINS; RELATED REAGENTS AND METHODS  FILE REPERENCE: DX01170K  TUBERT ADDITATION UNDERS. HELO(863 8188	RESULT 14 US-09-863-818A-9 ; Sequence 9, Application US/09863818A ; Publication No. US20030092881A1 ; Publication No. US20030092881A1	OY 719 rCysLysAlaAspLeuGlyCysArgSsrTyrThrAspG1uLeuH1sALaValALaPro 738	69 rSergly-LouglyGlugluc Tropropriate United States (1986) 2101 TTCAGGCCTGGGTGAGGAGGAACCTCCTGCCTTCCTTCCAAGCCCTCCTCTCTGGGTGAGGAGGAACCTCCTGCTTCCTGGGTGAGGCTGAGGAGGAACCTCCTGCTTCCTTC	679 tcluGlyLeuSerThrAspClnThrCluThrSerSerLeuThrCluSerValSerSerSe	Qy 659 oArgAspSerGlyIleTyrAspSerSerValProSerSerGluLeuSerLeuProLeuMe 679	Qy 635 ySerAlaAlaLeuGlnProLeuLeuHisThrValLysAlaGlySerProSerAspMetPr 659	
Qy 321 СувАгgLysGlnGlnGlnAsnIleTyrSerHisLeuAspGluGluSerSerGluSer 340	967 GTGGCCATCACAGTGCCACTGGTAGTCATATCGGCATTCGCGACGCTCTTCACTGTGATG	Db 907 AAAGTGATGCATTATGCCTTAAAGCCAGTGCACTCCCCGTGGGCCGGGCCCATCAGAGCC 966 Oy 301 MetAlaIleThrValProLeuValValIleSerAlaPheAlaThrLeuPheThrValMet 320	Qy 281 LysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyProIleArgAla 300	Qy 261 GlnAsnValSerProGlyAspTyrileIleGluLeuValAspAspThrAsnThrThrArg 280	ProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu	Qy 221 AlaprohisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly 240	Qy 201 LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis 220	Qy 181 ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp 200	Qy 161 ValLysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe 180	Qy 141 LysArgThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPhe 160	Qy 121 GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe 140	Oy 101 GlyAlaLeuGlyIleGluPheLeuLy8GlyPheArgVallleLeuGluGluLeuLy8Ser 120	Qy 81 IleThrIleSerGlnTyrAlaCy8Hi8AspGlnValAlaValThrIleLeuTrpSerPro 100	Qy 61 AspAsnCysThrThrTyrLeuAsnProValGlyLysHisVallleAlaAspAlaGlnAsn 80	Qy 41 TrpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLysTyr 60	Qy 21 SerGlnLeuAlaValAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThrCysGly 40	1 MetAlaProTrpLeuGlnLeuCysSerValPhep 	Match: 97.2* Indels: 3 Gaps: 0-616-788-2 (1-738) x US-09-863-818A-9 (1-2786)	Score: 3835.50 Matches: 722 Percent Similarity: 98.2* Conservative: 3 Best Local Similarity: 97.8* Mismatches: 12

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0-749-144	10-616-788-2 (1-738) x	681 GlyLeuSerThrAspGlnThrGluThrSerSerLeuThrGluSerValSerSerSerSer 700
Č	Percent Similarity: 98.2% Best Local Similarity: 97.8% Query Match: 97.2% DB: 8	661 AspSerGlyIleTyrAspSerSerValProSerSerGluLeuSerLeuProLeuMetGlu 680 
Length:	ent Scores: No.:	641 AlaAlaLeuGlnProLeuLeuHisThrValLysAlaGlySerProSerAspMetProArg 660
amino	; NAME/KEY: misc feature ; NAME/KEY: misc feature ; LOCATION: (519) . (519) ; OTHER INFORMATION: unknown US-10-749-144-9	621 GluSerGlnHisGlyGlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySer 640 
amino	; NAME/KEY: misc feature ; NAME/KEY: misc feature ; LOCATION: (475) (475) ; OTHER INFORMATION: unknown	601 PheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerGlnHis 620 
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amino	NAME/KEY: misc feature LOCATION: (194)(194) OTHER INFORMATION: unknown	561 GluLysGlnPheValProPheHisProProProLeuArgTyrArgGluProValLeuGlu 580
ı amino	; NAME/KEY: misc feature ; NAME/KEY: misc feature ; LOCATION: (170)(170) ; OTHER INFORMATION: unknown	541 SerLeuTyrValAlaIleCysAsnMetHisGlnPheIleAspGluGluProAspTrpPhe 560 
amino	; NAME/KEY: misc feature ; LOCATION: (144)(144) ; OTHER INFORMATION: unknown	521 ProGlyGlnH1sThrArgGlnGlySerArgArgAsnTyrPheArgSerLysSerGlyArg 540 
	mat_pep (118)	501 MetaspasnLeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGlu 520 
amino	ORMATI CDS	481 AspTyrSerCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeu 500 
	ORGANISM: Homo Bapiens PEATURE: NAME/KEY: misc_feature IOCATION: (8) - (8)	461 LeuArgGlnAlaLysGlnSerSerSerAlaAlaLeuSerLysPheIleAlaValTyrPhe 480 
3.2	; SOFTWARE: Patentin version 3.; SEQ ID NO 9; SEQ ID NO 9; LENGTH: 2786	441 GlyArgGlySerGlyLysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLys 460 
E: 2003-12-29 NUMBER: US 60/206,862 2000-05-24	CURRENT FILING DATE: 2003 PRIOR APPLICATION NUMBER: U PRIOR FILING DATE: 2000-05 PRIOR FILING DATE: 2000-05 NUMBER OF SEO ID NOS: 24	421 ValCysSerLysGlyMetLysTyrPheValAspLysLysAsmTyrLysHisLysGlyGly 440 
Daniel M.  : MANMALIAN RECEPTOR PROTEINS;  01170K1  N NUMBER: US/10/749 144	APPLICANT: GOTMAN, DANIEL M. TITLE OF INVENTION: MAMMALIAN RECEPTOR PR FILE REFERENCE: DX01170K1 CHERRYT APPLICATION NUMBER: HS/10/749 144	401 ArgGluGlyGlnArgGluTrpVallleGlnLysIleHisGluSerGlnPheIleIleVal 420 
16749144 1671	US-10-749-144-9 US-10-749-144-9 ; Sequence 9, Application US/10749144 ; Publication No. US20040197306A1 ; CENERAL INFORMATION:	381 LeuGlnAspPheCysGlyCysGluValAlaLeuAspLeuTrpGluAspPheSerLeuCys 400 
ATCTTGGTTGCCGCAGCTACACTGATGAAC	LYBALAA          AAAGCAG	361 CY®TYrSerSerLyBAspGlyGlnAsnHisMetAsnValValGlnCy8PheAlaTyrPhe 380
GGCCTGGGTGAGGAGGAAGCTCCTGCCCTTCCTCCA	2167	341 SerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgProLysValPheLeu 360 
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PTINVENTION: MAMMALIAN RECEPTOR PROTEINS; RELATED REAGENTS AND METHODS FERENCE: DX01170K1

APPLICATION NUMBER: US/10/749,144

FILING DATE: 2003-12-29

FPLICATION NUMBER: US 60/206,862

ILING DATE: 2000-05-24

DF SEQ ID NOS: 24

DF SEQ ID NOS: 24
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N: (519)..(519)
NFORMATION: unknown amino
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N: (475)..(475)
NFORMATION: unknown
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N: (442)..(442)
NFORMATION: unknown
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N: (194)..(194)
NFORMATION: unknown amino
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N: (170)..(170)
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Matches:
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Qy 661 AspSerGlyIleTyrAspSerSerValProSerSerGluLeuSerLeuProLeuMetGlu 680 [	1867 TTCTGCCTAAAGGTAGAGGCGGCTGTTCTTGGGGCAACCGGACCAGCCGACCCAGCACCCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACAGCACAGCACAGAAAAAA	Db 1687 TCCTATACGTCGCCATTTGCAACATGCACCAGTTTATTGACGAGAGCCCGACTGGTTC 1746  Qy 561 GluLysGlnpheValProPheHisProProLeuArgTyrArgGluProValLeuGlu 580	Oy  501 MetAspAsmLeuProGInLeuCySerHISLeuHiSSerArgAspHISGLYLeuGINGLU 520	461 LeuArgGlnAlaLysGlnSerSerSerAlaAlaLeuSerLysPheIleAlaValTyrPhe	Qy 421 ValCyBSerLyBGlyMetLyBTyrPheValABBLyBLyBLyBABRTYrLyBHiBLyBGlyGly 440	Ob  1147 TGCTAFTCCAGTAAAGATGGCCAGAATCACATGAATGTCCAGTGTTTCGCCTACTTC 1206  Qy  381 LeuGlnAspPheCysGlyCysGluValAlaLeuAspLeuTrpGluAspPheSerLeuCys 400	361 CysTyrSerSerLysAspGlyGlnAsnHisMetAsnValValGlnCysPheAlaTyrPhe

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Copyright (c) 1993 - 2006 Biocceleration Ltd.
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## ALIGNMENTS

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APPLICANT: SEKI, NAOHIKO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: OTSUKA, MOTOYUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: NOVEl full length cDNA
FILE REFERENCE: 084335-0191
CURRENT APPLICATION NUMBER: US/11/072,512
CURRENT FILING DATE: 2005-03-07
                                                                                                                                                                                                                                                                                                                                                                                                                              US-11-072-512-1429
                                                                                                                                                                                                                                                                                                                                                           Sequence 1429, Application US/11072512
Publication No. US20060029945A1
GENERAL INFORMATION:
APPLICANT: ISOGAI, TAKAO
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PRIOR APPLICATION NUMBER: US 60/350,978
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NAGAI, KEIICHI
IRIE, RYOTARO
TAMECHIKA, ICHIRO
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OTSUKI, TETSUJI
WAKAMATSU, AI
SATO, HIROYUKI
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TO, JUN-ICHI
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PRIOR FILING DATE: 2002-01-25
PRIOR APPLICATION NUMBER: JP 2001-379298
PRIOR FILING DATE: 2001-11-05
PRIOR FILING DATE: 2001-11-05
PRIOR FILING DATE: 2001-11-05
PRIOR FILING DATE: 2011-05
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PRIOR
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APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human G
FILB REFERENCE: 108827.135
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR PILING DATE: 2000-10-24
PRIOR FILING DATE: 2000-11-20
PRIOR PILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR PILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR PILING DATE: 2001-01-16
PRIOR PILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR PILING DATE: 2001-01-16
PRIOR PILING DATE: 2001-05-09
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR PILING DATE: 2001-05-09
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ORGANISM: Homo sapiens
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US-10-616-788-2 (1-738) x US-09-925-065A-50991 (1-612)
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CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR PILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2001-01-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 50991 LENGTH: 612 .
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APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
FILE REFERENCE: 108827.135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 50991, Application US/09925065A Publication No. US20040181048A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR FILING DATE: 2001-05-09
NUMBER OF SEQ ID NOS: 957086
                                                                                                                                                                                                                                                                                                                                                                                               193 AsnLeuAlaCysLysProPhe---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9 CTAPAACTARAPACATGTATCTTTATTCTCTTRATA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               173 SerAsnTyrHisProPhePhePheArgThrArgAlaCysAspLeuLeuGluProAsp
239 GluGlyProPheLysArgLysThrCysLysGln 249
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                                                                                                                                                        GTCTGGAAGCCTCGGAACCTGAACATCAGCCAGCATGGCTCGGACATGCAGGTGTCCTTC
                                                        GACCATGCACCGCACAACTTCGGCTTCCGTTTCTTCTATCTTCACTACAAGCTCAAGCAC
                                                                                     AspHisAlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHis
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RESULT 5
US-09-925-065A-829666
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Best Local Similarity:
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, ORGANISM: Homo sapiens
US-09-925-065A-672368
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PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR FILING DATE: 2001-05-09
PRIOR FILING DATE: 2001-05-09
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Publication No. US20040181048A1

GENERAL INFORMATION:

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
FILE REFERENCE: 108827.135

CURRENT APPLICATION NUMBER: US/09/925,065A

CURRENT FILING DATE: 2001-08-08
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LENGTH: 2387
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SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                          GAAGGACCTTTCAAGCGAAAGACCTGTAAGCAG 2118
                                                                                            GluGlyProPheLysArgLysThrCysLysGln 249
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                                                                                                                                                                                                                    GTCTGGAAGCCTCGGAACCTGAACATCAGCCAGCATGGCTCGGACATGCAGGTGTCCTTC
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                                                                                                                                                                                                                                                                                                                                                                                   SerAsnTyrHisProPhePhePheArgThrArgAlaCysAspLeuLeuLeuGlnProAsp 192
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Matches:
Conservative:
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DB:
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Best Local Similarity:
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                                                                                                                                                                                                    US-10-750-185-36133
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                                                                                                           GENERAL INFORMATION:
APPLICANT: MMI GENOMICS, INC.
APPLICANT: DENISE, Sue K.
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   APPLICANT:
APPLICANT:
APPLICANT:
TITLE OF IN
                                                                          APPLICANT:
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ORGANISM: Homo sapiens
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                                                         DeNISE, Sue K.
KERR, Richard
ROSENFELD, David
HOLM, Tom
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254.00
51.3%
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US-10-616-788-2 (1-738) x US-09-925-065A-829666 (1-599)
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PRIOR FILING DATE: 2001-05-09
NUMBER OF SEQ ID NOS: 957086
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 829666
                                                                                                                                                                                                                                      Sequence 36133, Application US/10750185
Publication No. US20050260603A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2001-01-16
PRIOR FILING DATE: 2001-01-16
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CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
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TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human
FILE REFERENCE: 108827.135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   193 AsnLeuAlaCysLysProPhe-----
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T: BATES, Stephen
T: FANTIN, Dennis
INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
                                                                                                                                                                                                                                                                                                                                                                                                                AspHisAlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLys 237
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Matches:
Conservative:
Mismatches:
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US-10-750-623-36133
                                               US-10-616-788-2 (1-738)
                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                             Alignment Scores:
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US-10-750-623-36133
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Best Local Similarity:
Query Match:
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SEQ ID NO 36133
LENGTH: 1385
TYPE: DNA
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SEQ ID NO 36133
LENGTH: 1385
TYPE: DNA
                                                                                                                                                                                                                                                                                      APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: METHODS AND SYSTEMS FOR INFERRING BOVINE TRAITS
FILE REFERENCE: MMILION-1
CURRENT APPLICATION NUMBER: US/10/750,623
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION UMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
PRIOR FILING DATE: 2002-12-31
                                                                                                                                                                                                                                                                                                                                                                                                                                              ENERAL INFORMATION:
APPLICANT: MMI GENOMICS, INC.
APPLICANT: DENISE, Sue K.
APPLICANT: KERR, Richard
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CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
NUMBER OF SEQ ID NOS: 64922
                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 64922
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BATES, Stephen
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CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
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APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE
FILE REFERENCE: MMII100-2
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                                     TrpValIleGlnLysIleHisGluSerGlnPheIleIleValValCysSerLysGlyMet 426
                                                                           AGTGAAGTTATCCTTGAGAAGTGGCAGAAAAAAGAAAATAGCCGAGATGGGTCCCGTGCAG 655
                                                                                                            CysGluValAlaLeuAspLeuTrpGluAspPheSerLeuCysArgGluGlyGlnArgGlu 406
                                                                                                                                                  TGCTTCCATCAC-----ACAGTTTGTTACTTCACTGAGTTTCTTCAAAAACCGCTGCAGA 595
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                                                                                                                                                                                     GlyGlnAsnHisMetAsnValValGlnCysPheAlaTyrPheLeuGlnAspPheCysGly 386
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PILE REPERENCE: MMILIOO-1
CURRENT APPLICATION NUMBER: US/10/750,623
CURRENT FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR EILING DATE: 2002-12-31
NUMBER OF SEQ ID NOS: 64922
SOFTWARE: PALENTIN VERSION 3.1
SEQ ID NO 50374
LENGTH: 1365
TYPE: DNA
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Best Local Similarity:
Query Match:
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APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: METHODS AND SYSTEMS FOR INFERRING BOVINE TRAITS
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                                                       PRIOR APPLICATION NUMBER: US 60/066,677
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: US 60/069,957
PRIOR RILING DATE: 1997-12-17
PRIOR APPLICATION NUMBER: US 60/074,121
PRIOR FILING DATE: 1998-02-09
PRIOR APPLICATION NUMBER: US 60/081,563
PRIOR FILING DATE: 1998-02-09
PRIOR APPLICATION NUMBER: US 60/081,563
                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/978,360A
CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                     APPLICANT: Jobert, Severin
APPLICANT: Clusel, Catherine
TITLE OF INVENTION: Complementary DNA's Encoding Proteins with Signal Peptides
FILE REFERENCE: 56.US4.CIP
                                                                                                                                                                                                                                                                      APPLICANT: Edwards, Jean-Baptiste
APPLICANT: Duclert, Aymeric
APPLICANT: Bougueleret, Lydie
           APPLICATION NUMBER: US 60/096,116 FILING DATE: 1998-08-10
                                           FILING DATE: 1998-04-13
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Bougueleret, Lydie
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                                                 524 HisThrArgGlnGlySerArgArgAsnTyrPheArgSerLysSerGlyArgSerLeuTyr 543
                                                                                                                                                                                504 LeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGluProGlyGln
                                                                                                                                                                                                                                                                                                             487 AspValProGly-----IleLeuAspLeuSerThrLysTyrArgLeuMetAspAsn
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: polyA_site LOCATION: 1687..1701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Von Heijne matrix.
OTHER INFORMATION: score 5.10
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ORGANISM: Homo Sapiens
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LOCATION: 245..796
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OR APPLICATION NUMBER: US 09/191,997
OR FILING DATE: 1998-11-13
OR APPLICATION NUMBER: US 09/215,435
OR FILING DATE: 1998-12-17
OR APPLICATION NUMBER: PCT/IB98/02122
OR APPLICATION NUMBER: US 09/247,155
OR APPLICATION NUMBER: US 09/247,155
OR FILING DATE: 1999-02-09
OR FILING DATE: 1999-02-09
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                           TAGTGAAGGTGCTACGGTGCAGCTGACTCCATATTTTCCTACTTGTGGCAGCGACTGCAT
                                                                                                         lHisSerProTrpAlaGlyProIleArgAlaMetAlaIleThrValProLeuValValIl
                                                                                                                                                           eGluLeuValAspAspThrAsnThrThrArgLysValMetHisTyrAlaLeuLysProVa
                                                                                                                                                                                       GAG-----GAGACAGTAGAAGTGAA-CTTCACAACCACTCCCCTGGGAAACAGATACAT
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                                                      eSerAlaPheAlaThrLeu-----
                                                                                                                                    GGCTCTTATCCAACACAGCACTATC-
                                                                               GTTTGAGCCACACCAGAAGAAACAAACGCGAGCTTCAGTGGTGATTCCAGTGACTGGGGA
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Publication No. US20060008901A1
GENERAL INFORMATION:
APPLICANT: Eaton, Dan L.
APPLICANT: Filvaroff, Bllen
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INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
                 Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Watanabe, Colin K.
Wood, William I.
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                                                                                                                                        Gerritsen, Mary E. Goddard, Audrey
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FILE REFERENCE: B323ORIC1
; CURRENT APPLICATION NUMBER: US/10/063,703
; CURRENT FILING DATE: 2002-05-08
CURRENT FILING DATE: 2002-05-08
Prior Application removed - See Palm or Fil
NUMBER OF SEQ ID NOS: 170
; SEQ ID NO 157
; LENGTH: 1515
; TYPE: DNA
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US-10-063-703-157
                                                              1023 ATCTGAAATATGTTTCCATCAC-----ACAATTTGTTACTTCACTGAATTTCTTCAAAA
               363 rSerLysAspGlyGlnAsnHisMetAsnValValGlnCysPheAlaTyrPheLeuGlnAs 383
                                                                                                                               963 GAAGACTTCCTTTTCTACCACCACACTACTGCCCCCCATTAAGGTTCTTGTGGTTTACCC 1022
                                                                                                                                                                                                                                                                                                  332 sLeuAspGluGluSerSerGluSerSerThrTyrThrAlaAlaLeu-------
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CCATTGCAGAAGTGAGGTCATCCTTGAAAAGTGGCAGAAAAAAGAAAATAGCAGAGATGGG
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                                                                                                                                                                                                                                                                                                                                   CCGACATAAAGGAACAGTTGTGCTCTGC-----CCACAAACAGGCGTCCCTTTCCC 842
                                                                                                                                                                                                                                                                                                                                                    -----PheThrValMetCysArgLysLysGlnGlnGluAsnIleTyrSerHi 332
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224 AsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGlyProPheLys 243	204 ABNLeUABNIleSerGlnHiBGlySerABDMetGlnValSerPheABDHiBAlaProHiB 223        ::::::          :::    433 AATGCAAATATGAATGAAGATGGCCCTTCCATGTCTGTGAATTTCACCTCACCAGGC 489	616-788-2 (1-738) x US-11-102-240-157 (1-1515)	Inent Scores: 0.0249	SULT 12 -11-102-240-157 -11-102-240-157 Sequence 157, Application US/11102240 Publication No. US20050260647A1 GENERAL INFORMATION: APPLICANT: Goddard, Audrey APPLICANT: Goddowski, Paul J. APPLICANT: Grimaldi, Christopher J. APPLICANT: Godowski, Paul J. APPLICANT: Godowski, Paul J. APPLICANT: Godowski, Paul J. APPLICANT: Grimaldi, Christopher J. APPLICANT: Grimaldi, Christopher J. APPLICANT: Godowski, Paul J. APPLICANT: Godowski, Paul J. APPLICANT: MOOd, William I.  CURRENT FILING DATE: 2005-04-08 PRIOR FILING DATE: 2002-05-07 PRIOR APPLICATION NUMBER: 10/063662 PRIOR APPLICATION NUMBER: 10/06867 PRIOR APPLICATION NUMBER: 10/06867 PRIOR APPLICATION NUMBER: 60/170262 PRIOR APPLICATION NUMBER: 60/170262 PRIOR FILING DATE: 2000-08-24 PRIOR PILING DATE: 2000-08-24 PRIOR PILING DATE: 2000-08-24 PRIOR PILING DATE: 199-12-09 NUMBER OF SEQ ID NOS: 170 SEQ ID NO 157 LENGTH: 1515 TYPE: DAN ORGANISM: Homo Sapien -11-102-240-157	1419 TGCCACTGCTTTCTGTGCAGAACTT 1443	503 nLeuProGlnLeuCysSerHisLeu 511 ;     :::	483 rCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeuMetAspAs 503	1312ÀĞCCAGATTCATCTĞCACAAATACGTGGTGĞTCTACTTTAGAGAGAT 1358	463 nAlaLysGlnSerSerAlaAlaLeuSerLysPheIleAlaValTyrPheAspTyrSe 483	1257 GAACTCTCAAGACCTCTTCCCCCTTGCCTTTAACCTTTTCTGCAGTGATCTAAGA 1311	erGlyLysGlyGluLeuPheLeuValAlaVal	1197 CAATGACGTCAACAGTGTGTGCGATGGTACCTGTGGCAAGAGCGAGGGCAGTCCCCAGTGA 1256	423 rLysGlyMetLysTyrPheValAspLysLysAsnTyrLysHisLysGlyGlyGlyArgGl 443	1137 TCCAGTGCAGTGGCTTGCCACTCAAAAGAAGGCAGCAGACAAAGTCGTCTTCCTTTC 1196	rpVallleGlnLysIleHisGluSerGlnPheIleIleValV

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RESULT 13
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Sequence 244, Application US/11204311 Publication No. US20060040304A1 GENERAL INFORMATION:
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APPLICANT: BOUGUETERE, LYdie
APPLICANT: Cohen, Annick
TITLE OF INVENTION: BIALLELIC MARKERS RELATED TO
FILE REFERENCE: 62.US4.DIV
CURRENT APPLICATION UNMBER: US/11/204,311
CURRENT FILING DATE: 2005-08-15
PRIOR APPLICATION NUMBER: US/10/294,934
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US 09/671,317
PRIOR APPLICATION NUMBER: US 09/671,317
PRIOR APPLICATION NUMBER: US 09/536,178
PRIOR APPLICATION NUMBER: US 09/536,178
PRIOR FILING DATE: 2000-03-23
PRIOR FILING DATE: 2000-03-23
PRIOR APPLICATION NUMBER: US 60/126,269
PRIOR APPLICATION NUMBER: US 60/126,269
PRIOR APPLICATION NUMBER: US 60/126,269
PRIOR APPLICATION NUMBER: US 60/131,961
PRIOR APPLICATION NUMBER: US 60/131,961
PRIOR APPLICATION DATE: 1999-03-25
PRIOR APPLICATION NUMBER: US 60/131,961
PRIOR APPLICATION DATE: 1999-03-25
PRIOR APPLICATION DATE: 1999-03-26
                                                                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                            US-10-616-788-2 (1-738) x US-11-204-311-244 (1-1001)
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SOFTWARE: Patent.pm
SEQ ID NO 244
LENGTH: 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_binding
LOCATION: 489..513
OTHER INFORMATION: 12-192-334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Blumenfeld, Marta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: primer_bind
LOCATION: 346..365
OTHER INFORMATION: downstream
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 815..834
OTHER INFORMATION: upstream
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: primer_bind
LOCATION: 815..834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 481..500
OTHER INFORMATION: 12-192-334.mis1,
FEATURE:
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OTHER INFORMATION: 12-192-334 : polymorphic
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OTHER INFORMATION: 12-192-334.mis2,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: allele
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                                                                                                                         492
153
                                        505 ProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGlu-----ProGly
                                                                                                                                                                                         477 AlavalTyrPheAspTyrSerCysGluGlyAspValProGlyIle----
                                                                                                                                                             33 GCCATCTCCAGCTCCTACAGCTCCACGGGAGGCTGCCCGGGGCTAAAGCCGAGGAGGAGGGG
                                                                                CCTCAGGCTGTCTCTTCAGGTCACACCCCAGTGTGAAAAAGGCAGCAGATATAGCACCAGGG
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212
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RESULT 14
US-11-108-172-1112
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APPLICANT:
APPLICANT:
APPLICANT: Carter, Darrick
TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
FILE REFERENCE: 210121.471C15
                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Xu,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                576
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            519 ---ATGGATGCACAGCAGGAGACACACAAGTCCCAAGACTGCCTGGGCCTACTGGACCCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543 TyrValAlaIleCysAsnMetHisGlnPheIleAspGluGluProAspTrpPheGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     702 euGlyGluGluGluProProAlaLeuProSerLyaLeuLeuSerSerGlySerCyaLyaA 722
                                                                                                                                                                             Stolk, John A.
Wang, Tongtong
Jiang, Yuqiu
Smith, Carole L.
King, Gordon E.
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                                                                            Clapper, Jonathan D. Skeiky, Yasir A. W. Fanger, Gary R. Vedvick Thomas S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                laAspLeuGlyCysArgSerTyrThrAspGluLeuHis 734
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySerAlaAlaLeuGlnPro
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                                                                                                                                                                                                                                                                                                        Secrist, Heather
Benson, Darin R.
                                                                                                                                                              Wang, Aijun
                                                                                                                                                                                                                                                                                       Meagher, Madeleine Joy
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                                                                                                                                           Jonathan
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Best Local Similarity:
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NUMBER OF SEQ ID NOS: 1130
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1112
LENGTH: 16382
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/11/108,172
CURRENT FILING DATE: 2005-04-15
CURRENT PILING DATE: 2005-04-15
PRIOR APPLICATION NUMBER: US 10/025,380
PRIOR FILING DATE: 2001-12-19
PRIOR APPLICATION NUMBER: US 09/922,217
PRIOR TELEMORETION NUMBER: US 09/922,217
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 09/833,263
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 09/504,629
FILING DATE: 2000-02-15
APPLICATION NUMBER: US 09/480,321
FILING DATE: 2000-01-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US (FILING DATE: 2000-05-19 APPLICATION NUMBER: US (FILING DATE: 2000-03-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 09/476,296
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   471
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                                                               LysAspProLysGlnLeuAsnSerSerPheLysArgThrGly------MetGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATGTCAAGGAGTTTGCCGTGGTGGCCGGTGCCGCAGGTGCCTCGGTCAGTGTCACGCTG
                                                                                                                                             SerGluGlyArg------GlnCysGlnGlnLeuIleLeu
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                         ProGlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLys 119
                                                                                                                                                                                                                                                                                                                                                                                            ---GlyLysHisValIleAlaAspAlaGlnAsnIleThrIleSerGlnTyrAlaCys---
                                                                                                         -----AspGlnValAlaValThrIleLeuTrpSer
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RESULT 15  US-11-000-688-239  Sequence 239, Application US/11000688  Publication No. US20050287544A1  GENERAL IMPORMATION: APPLICANT: BETWICCI, Francois APPLICANT: HOULGAITE, Remi APPLICANT: HOULGAITE, Remi APPLICANT: HOULGAITE, Remi TITILE OF INVENTION: GENE EXPRESSION PROFILING OF COLON CANCER WITH DNA ARRAYS FILE REFERENCE: 1423-R-03 CURRENT APPLICATION NUMBER: US/11/000,688 CURRENT FILING DATE: 2004-12-01 PRIOR APPLICATION NUMBER: US 60/525,987 PRIOR FILING DATE: 2003-12-01	Db 1883 CTGCCAGTCTCCCTGAGTGAGGGGCTGGGTGTTACCAAGGGGACCAGGGGCCTG 1742  Qr 471 SerLysphelle	

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Best Local Similarity:
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; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 239
; LENGTH: 16382
; TYPE: DNA
; ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-616-788-2 (1-738) x US-11-000-688-239 (1-16382)
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LOCATION: (1)..(16382)
OTHER INFORMATION: fc fragment
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                    1059 GTACCAGGCTGTGAGGGCGTGGCCCTGGTAGTGGCACAGACGAAGGCTATCAGCGGGCTG
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                                                                                                                                                                                                                               GTCCGGCCATCCTGGCCACTCTACCTGTCTGCAAATGTGGGCATCCAGGTCCTGTTTTT
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 530 ArgArgAsnTyrPheArgSerLysSerGlyArgSerLeuTyrValAlaIleCysAsnMet 549
                                                                                                                                                                            GTGGAGCTGGTCTTTGGGCTGGTGACTATGACTGGGACTGCCAG-------
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                                                                                                                                     GlyIleLeuAspLeuSerThrLysTyrArgLeuMetAspAsnLeuProGlnLeuCysSer 509
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Ş	550	HisGlnPheIleAspGluGluFroAspTrpPheGluLysGlnPheValProPheHisPro 569
В	1908	
ş	570	ProProLeuArgTyrArgGluProValLeuGluLysPheAspSerGlyLeuValLeuAsn 589
9	1929	AAGCTGGATGATGGG 1943
ş	590	AspValMetCysLysProGlyProGluSerAspPheCysLeuLysValGluAlaProVal 609
문	1944	GACTACCTGTGTGAGGATGGCTGCCAGAACAACTGT 1979
ş	610	LeuGlyAlaThrGlyProAlaAspSerGlnHisGluSerGlnHisGlyGlyLeuAspGln 629
8	1980	CCGGCCTGCACCCCAGGCCAGGCCAACACTATGAGGGCGACCGA 2024
<i>₽</i>	630	AspGlyGluAlaArgProAlaLeuAspGlySerAlaAlaLeu 643
₽	2025	CTCTGTGGCATGCTGACCAAGCTCGATGGCCCCTTCGCTGTCTGCCATGACACCCCTGGAC 2084
ş	644	GlnProLeuLeuHisThrValLysAlaGlySerProSerAspMetProArgAspSer 662
	2085	CCCAGGCCTTCCTGGAGCAG 2105
Ş	663	GlyIleTyrAspSerSerValProSerSerGluLeuSerLeuProLeuMetGluGlyLeu 682
8	2106	TGTGTATATGACCTGTGTGTGGGTGGGGGAGCGGCTCAGCCTGTGCCGTGGCCTC 2162
Ŋ	683	SerThrAspGlnThrGluThrSerSerLeu-ThrGluSerValSerSerSerSerGlyLe 702
8	2163	AGCGCCTATGCCCAGGCCTGTCTGGAGCTTGGCATCTCGGTTGGGAC 2210
Ŋ	702	uGlyGluGluGluProProAlaLeuProSerLysLeuLeuSerSerGl 718
8	2211	CCCCCI
	718	ySer-CygLygAlaAgpLeuGlyCyg 726
g	2271	GCCCTGCTTGCCCGACCTCCTGCAACGGGGCTGC 2305

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-LOOPEXT=0 - UNITS=551ts -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
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-NCPU=6 -ICPU=3 -NO_MMAP -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
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1: /cgn2_6/ptodata/l/ina/1_COMB.seq:*

2: /cgn2_6/ptodata/l/ina/5_COMB.seq:*

3: /cgn2_6/ptodata/l/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/l/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/l/ina/PCTUS_COMB.seq:*

6: /cgn2_6/ptodata/l/ina/PCTUS_COMB.seq:*

7: /cgn2_6/ptodata/l/ina/PCOMB.seq:*

8: /cgn2_6/ptodata/l/ina/RE_COMB.seq:*

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Sequence 125, App
                                              Sequence
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                                                                                            Sequence 126,
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e 244,	e 21, App	е 2	e 21, App	e 2134, A	e 226, Ap	e 22	e 17,	e 17, App	e 17363	е е	e 293,	e 4016	e 3686	e 11,	(D	e 762,	e 5787,	e 17529	e 12807	e 69	e 68	Ø	e 1,	e 1,	e 1,	e 1,	e 1,	e 1,	e 1,	e 1,	equence 9,	e 9,	equence 9,	e 9, App	Sequence 9, Appli

## ALIGNMENTS

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; SOFTWARE: PatentIn Ver. 2
SEQ ID NO 1429
; LENGTH: 2894
; TYPE: DNA
; ORGANISM: Homo BapienB
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US-10-104-047-1429
               Query Match:
                                                 Percent Similarity
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                                                                                       Pred. No.:
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                                                                                                                                            US-10-104-047-1429
                                  Best Local Similarity:
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APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. 6943241e1 full length cDNA
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1429, Application US/10104047 Patent No. 6943241
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400 1289	381 LeuGlnAspPheCysGlyCysGluValAlaLeuAspLeuTrpGluAspPheSerLeuCys 
380 1229	361 CYSTYrSerSerLysAspGlyGlnAsnHisMetAsnValValGlnCysPheAlaTyrPhe
360 1169	341 SerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgProLysValPheLeu 
340 1109	321 CYBATGLYBLYBGINGINGINABNIIeTYYSEYHIBLENABPGINGINSEYSEYGINSEY
320 1049	301 MetAlaIleThrValProLeuValValIleSerAlaPheAlaThrLeuPheThrValMet :::
300 989	281 LysValmetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyProIleArgAla
280 929	261 GlnAsnValSerProGlyAspTyrIleIleGluLeuValAspAspThrAsnThrThrArg 
260 869	241 ProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu
240 809	221 AlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly
220 749	201 LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis 
200	181 ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp
 180 629	161 VallysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe  
 160 569	141 LysargThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPhe
 140 509	121 GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe
 120 449	101 GlyAlaLeuGlyIleGluPheLeuLy8GlyPheArgValIleLeuGluGluLeuLy8Ser 
 100 389	81 IleThrileSerGlnTyrAlaCysHisAspGlnValalaValThrileLeuTrpSerPro
 80 329	61 AspAsnCysThrThrTyrLeuAsnProValGlyLysHisValIleAlaAspAlaGlnAsn 

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GlyLeuGlyGluGluGluProProAlaLeuProSerLy8LeuLeuSerSerGlySerCy8
                                                      PheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerGlnHis
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RESULT 2
US-09-747-259-17
; Sequence 17, Application US/09747259
; Patent No. 6569645
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman

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Alignment Scores:  Pred. No.:  96.0% Score:  Percent Similarity:  96.0%  Best Local Similarity:  95.8%  Mismatches:  11  Query Match:  18  DB:  09  24 AlavalAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThr 38	PRIOR APPLICATION NUMBER: US 60/242,837 PRIOR PILING DATE: 2000-10-24 PRIOR APPLICATION NUMBER: PCT/US00/30873 PRIOR APPLICATION NUMBER: PCT/US00/30873 PRIOR PILING DATE: 2000-11-10 PRIOR APPLICATION NUMBER: US 60/253,646 PRIOR FILING DATE: 2000-11-28 PRIOR PILING DATE: 2000-12-01 PRIOR FILING DATE: 2000-12-01 PRIOR FILING DATE: 2000-12-01 PRIOR FILING DATE: 2000-12-01 PRIOR FILING DATE: 2000-12-01 ONUMBER OF SEQ ID NOS: 39 SEQ ID NO 17 LENGTH: 2319 TYPE: DNA ORGANISM: Homo Sapien US-09-747-259-17	APPLICATION PILING DATE APPLICATION	APPLICANT: Goddard, Audrey APPLICANT: Godowski, Paul APPLICANT: Grimaldi, Christopher APPLICANT: Grimaldi, Christopher APPLICANT: Li, Hanzhong APPLICANT: Hillan, Kenneth APPLICANT: Tumas, Daniel APPLICANT: Vandlen, Richard APPLICANT: Vandlen, Richard APPLICANT: Wattanabe, Colin APPLICANT: Vansura, Daniel TITLE OF INVENTION: IL-17 HOMOLOGOUS POLYPEPTIDES AND THERAPEUTIC USES THEREOF FILE REFERENCE: P1381ATC1P1 (US) CURRENT APPLICATION NUMBER: US/09/747, 259 CURRENT APPLICATION NUMBER: US 09/311, 832 PRIOR APPLICATION NUMBER: US 60/172,096 PRIOR APPLICATION NUMBER: US 60/173,481 PRIOR APPLICATION NUMBER: US 60/175,481
326 1012 346 1072 366 1132 386	Oy 246 ThrCyr Db 772 ACCIGN OY 266 GlyAsg OY 266 AlaLeu OY 286 AlaLeu OY 286 AlaLeu OY 306 ProLeu OY 306 ProLeu OH 395 CCACTR	179 532 199 592 210 652 226 712	Oy 59 LYSTY2 Db 172 AAATAI OY 79 GINASI OY 79 GINASI OY 99 SerPrr OY 99 SerPrr OY 119 LYSSe1 Db 352 AAGTOC OY 119 LYSSe1 Db 352 AAGTOC OY 139 SerPhr Db 412 AGCTTT OY 159 TYPPhe OY 159 TATTOC
	ThrcysLysGlnGlucInfhrThrcGlufhrThrSerCysLeuLeuGlnAsnValSerPro 265		LysTyrAspAsnCysThrThrTyrLeuAsnDroValGlyLysHisValIleAlaAspAla 78

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US-09-799-451-125

; Sequence 125, Application US/09799451

; Patent No. 6783969

; GENERAL INFORMATION:
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                                                                                                                                                                                                                                     GluProProAlaLeuProSerLysLeuLeuSerSerGlySerCysLysAlaAspLeuGly
                                                                                                                                                                                                                                                                                              CAGACAGAAACGTCTTCCCTGACGGAGAGAGCGTGTCCTCCTCTTCAGGCCTGGGTGAGGAG
                                                                                                                                                                                                                                                                                                                     GlnThrGluThrSerSerLeuThrGluSerValSerSerSerSerGlyLeuGlyGluGlu
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APPLICANT: Zhao, Qing A.
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Jian-Rui
APPLICANT: Yamazaki, Victoria
APPLICANT: Yamazaki, Victoria
APPLICANT: Wang, Zhiwei
APPLICANT: Wang, Zhiwei
APPLICANT: Yang, Yonghong
APPLICANT: Wang, Yonghong
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6783959el Nucleic Aci
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 803
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: Goodrich, Ryle
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: Ren, Peiyan
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Xue, Aidong J.
Zhao, Qing A.
Wang, Jian-Rui
Ma, Yunqing
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; SOPTWARE: FastSEQ for Windows Version
; SEQ ID NO 117
; LENGTH: 3120
; TYPE: DNA
; ORGANISM: Human
US-09-949-002-117
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US-09-949-002-117
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores: Pred. No.:
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APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH INFLAMMATORY AUTOIMMUNE DISEASE, M
TITLE OF INVENTION: AND USES THEREOF
FILE REFERENCE: CL000790
CURRENT APPLICATION NUMBER: US/09/949,002
CURRENT FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: 60/231,401
PRIOR APPLICATION NUMBER: 60/231,401
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 10823
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                                                                         ----CGAAACCTGACCCCTCCTCCCCAAAGGACCTGCAGATCCAGCTGCACTTTGCC
                                                                                                           AspAlaGlnAsnIleThr----
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429 1388	GlnLysIleHisGluSerGlnPheIleIleValValCysSerLysGlyMetLysTyrPhe :::	410 1335
409 1334	TrpGluAspPheSerLeuCysArgGluGlyGlnArgGluTrpVal	394 1275
393 1274	ValGlnCysPheAlaTyrPheLeuGlnAspPheCysGlyCysGluValAlaLeuAspLeu 	374 1215
373 1214	LysValPheLeuCysTyrSerSerLysAspGlyGlnAsnHisMetAsnVal	357 1158
356 1157	SerGluSerSerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgPro	338 1098
337 1097	ThrValMetCysArgLysLysGlnGlnGluAsnIleTyrSerHisLeuAspGluGluSer	318 1047
317 1046	IleArgAlaMetAlaIleThrValProLeuValValIleSerAlaPheAlaThrLeuPhe ::: CTGTGGGTGTACTGGTTCATCACGGGCATCTCCATCCTGCTGGTGGGCTCGGTCATCCTG	298 987
297 986	ThrThrArgLy8ValMetHisTyrAlaLeuLy8ProValHisSerProTrpAlaGlyPro	278 927
277 926	GlnAsnValSerProGlyAspTyrIleIleGluLeuValAspAspThrAsn	261 867
260 866	ProPheLy9ArgLy8ThrCy8Ly8GlnGluGlnThrThrGluThrThrSerCy8LeuLeu	241 807
240 806	AlaprohisasnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly::::::	221 750
220 749	AgnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis	206 690
205 689	ProPheTrpLysProArgAsnLeu	198 633
197 632	ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLys	181 573
180 572	ValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhePhe	163 513
162 512	ThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPheValLys ::: ::	143 456
142 455	ArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPheLysArg	123 402
122 401	LeuGlyTleGluPheLeuLysGlyPheArgValITleLeuGluGluLeuLysSerGluGly	103 342

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	CAGGCCCAGGGGGGCTGC 2336	2319	유 성
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GluLysPheAspSerGlyLeuValLeuAsnAsp 590	10	571	ş
GCAGATGACCAGGATGCCCCCGTCCCTGGACGAA 1841		1782	망
LysGlnPheValProPheHisProPro 570	-	559	ş
AGGTTCCGGGACTGGCAGGTCCGCTGTCCCGAC 1781		1722	ఠ
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TGTCGGGGGACAACTACCTGCGGAGCCCGGGC 1721	:::	1662	망
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	AspTyrSerCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeu	481	. ঠ
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ACTGCAGCCATGAACATGATCCTCCCGGACTTC 1502		1443	망
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-GCCAAGTGGCAGGCGCTCCTGGGCCGGGGGGGCCTGTGCGGCTGCGCGCTGCGAC 1442		1389	뭥
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US-09-949-002-126
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Patent No. 6900016
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH INFLAMMATORY AUTOIMMUNE DISEASE, METHODS OF
TITLE OF INVENTION: AND USES THEREOF
TITLE OF INVENTION: AND USES THEREOF
TITLE OF INVENTION: WINBER: US/09/949,002
CURRENT FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: 60/231,401
PRIOR PILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
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SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 126
LENGTH: 3120
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                                                                                                                                                                  Val-----ValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe
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                                                                                           ArgThrArgAlaCysAspLeuLeuClnProAspAsnLeuAlaCysLys------
                                                                                                                                                                                                       TGGCGTTTTACCTTCAGCCACTTTGTG---GTTGACCCTGACCAGGAATATGAGGTGACC
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                                ProGlyGlnHisThrArgGlnGly-----SerArgArgAsnTyrPheArgSerLysSer 538
                                                                                                      MetAspAsnLeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGlu 520
                                                                                                                                                   AspTyrSerCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeu
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 CCGGGCCGCATGCACCGCGTAGGGGAGCTGTCGGGGGAACTACCTGCGGAGCCCGGGC 1721
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                                                                         ATGGACAGGTTCGAGGAGGTG-----TACTTCCGCATCCAGGACCTGGAGATGTTCCAG
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RESULT 6
US-08-620-694A-9
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                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Yao, Zhengbin
APPLICANT: Spriggs, Melanie
APPLICANT: Fanslow, William
TITLE OF INVENTION: No. 5869286el Receptor That Binds
NUMBER OF SEQUENCES: 10
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
COMPUTER: Apple Operating System 7.5.5
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/620,694A
                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                             COUNTRY: U
                                                                                                                                                                                                                                                 STREET:
                                                                                                                                                                                                       STATE: WA
                                                                                                                                                                                                                            CITY: Seattle
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                                                                                                                                                                                                                                                 E: Immunex Corporation
51 University Street
                                                                                                                                                                                  USA
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Best Local Similarity:
Query Match:
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US-08-620-694A-9
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APPLICATION NUMBER: USSN 08/538
PRIOR APPLICATION: 435
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 08/410
PILING DATE: 23 MARCH 1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Perking, Particle Anne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (206)
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HYPOTHETICAL: NO ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 34,695
REFERENCE/DOCKET NUMBER: 261
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206)587-0430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: single
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    143 ThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPheValLys 162
                                                                                                                                                                                  103 LeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSerGluGly 122
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                                                                                          ArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPheLysArg 142
                                              CGTTTGTGCGTCAGG-----TTTGAGTTTCTGTCCAAACTGAGGCATCACCACAGGCGG
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(206)
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US-09-022-255-9 ; Sequence 9, Application US/09022255 ; Patent No. 6072033 ; GENERAL INFORMATION: ; APPLICANT: Yao, Zhengbin ; APPLICANT: Spriggs, Melanie ; APPLICANT: Fanslow, William ; TITLE OF INVENTION: No. 6072033el Receptor That Binds IL-17 ; NUMBER OF SEQUENCES: 10 ; CORRESPONDENCE ADDRESS:		. 2190 . 661 2232 681 2277	Oy 624 624  Db 2070 CCAGCCCCACACCCTCCACACCCTGGTGCTCGCCGCAGAGGAGGGGGCCCTGGTGGCC 2129  Oy 625GlyGlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySer 640  Oy 625	1902 GAGGTGTTTGAGGAGCCACTGCTGCTGCTCGGGAACCGGCATCGTGAAGCGGGCG  591 ValMetCysLysProGlyProGluSerAspPheCysLeuLysValGluAlaProValLeu  591 ValMetCysLysProGlyProGluSerAspPheCysLeuLysValGluAlaProValLeu  591 ValMetCysLysProGlyProGluSerAspPheCysLeuLysValGluAlaProValLeu  591 ValMetCysLysProGlyProGluSerAspPheCysLeuLysValGluAlaProValLeu  591 ValMetCysLysProAllaProGlyProGluSerGluHis	Qy 539 GlyArgSerLeuTyrValAlaIleCysAsnMetHisGlnPheIleAspGluGluProAsp 558	Db 1563 AAGAGG

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Query Match:
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                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: USSN 08/620,694
FILING DATE: 21 MARCH 1996
APPLICATION NUMBER: USSN 08/538,765
FILING DATE: 7 AUGUST 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 08/410,535
FILING DATE: 23 MARCH 1995
ATTORNEY/AGENT INFORMATION:
NAME: DATA: BATTORNEY/AGENT INFORMATION:
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Human
STRAIN: IL-17 R (hCTLA8 receptor)
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LENGTH: 323 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOPTWARE: Microsoft Word for Apple, Version 6.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,695
REFERENCE/DOCKET NUMBER: 2617
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
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                                                    59 LysTyrAspAsnCys-----ThrThrTyrLeuAsnProValGlyLysHisVallleAla 76
                                                                                                                                                                                               51 SerGlyLeu-----
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 410 GlnLysIleHisGluSerGlnPheIleIleValValCysSerLysGlyMetLysTyrPhe 429
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                                                                    TrpGluAspPheSerLeuCysArgGluGlyGlnArgGluTrpVal------Ile 409
                                                                                                                                      ValGlnCysPheAlaTyrPheLeuGlnAspPheCysGlyCysGluValAlaLeuAspLeu 393
                                                                                                                                                                                AAGCCCAGGAAGGTCTGGATCATCTACTCAGCC---GACCACCCCCTCTACGTGGACGTG
                                                                                                                                                                                                                                                                                   SerGluSerSerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgPro--- 356
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                                     AGTGATGACACCAAATACACCGATGGCCTGCCTGCGGGCTGACCTGATCCCCCCACCGCTG
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                                                                                                                                                                                                                                                                                                                                                                                               CTGTGGGTGTACTGGTTCATCACGGGCATCTCCATCCTGCTGGTGGGCTCCGTCATCCTG 1106
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                                                                                                             GlyLeuGlyGluGluFroProAlaLeuProSerLysLeuLeuSerSerGlySerCys 720
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                                                                      GAGCACCTCGAAGGCTTGATGCTCTCGCTCTTCGAGCAGAGTCTGAGCTGC
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US-09-022-696-9
                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
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                                                                                        US-10-616-788-2 (1-738) x US-09-022-696-9 (1-3223)
                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                       Alignment Scores:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN
FILING DATE: 23 MARCH 199
CLASSIFICATION:
ATTORNEY/ACENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System
SOFTMARE: Microsoft Word for Apple, Versi
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Perkins, Patricia Anne REGISTRATION NUMBER: 34,695 REFERENCE/DOCKET NUMBER: 2617-B TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECUL: N
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN: IL-17 R (hCTLA8 receptor)
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                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
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; NAME/KEY: CDS ; LOCATION: 932690 US-08-978-773-3 Alignment Scores: 1.46e-24 Length: 323 Pred. No.: 321.50 Matches: 183 Score: 35.94 Conservative: 106 Best Local Similarity: 22.74 Mismatches: 357	NO O E: uman CE:	; TELEPAX: (206) ; INFORMATION FOR SEQ ID NO: 3: ; SEQUENCE CHARACTERISTICS: ; LENGTH: 3223 base pairs ; TYPE: nucleic acid ; TYPE: nucleic scid ; STRANDEDNESS: single ; TOPOLOGY: linear ; MOLECULE TYPE: CDNA to mRNA	; FILING DATE: 27 NOVEMBER 1996 ; CLASSIFICATION: 530 ; ATTORNEY/AGENT INFORMATION: ; NAME: Perkins, Patricia Anne REGISTRATION NUMBER: 34,693 ; REFERENCE/DOCKET NUMBER: 2623-A TELECOMMUNICATION INFORMATION: ; TELEPHONE: (206)587-0430	,773 52,525	COUNTRY: USA ZIP: 98101 COMPUTER READABLE FORM: HADDIUM TYPE: Floppy disk COMPUTER: Apple PowerMacintosh OPERATING SYSTEM: Apple Operating System 7.5.5 SOPTWARE: Microsoft Word for PowerMacintosh, Version 6.0.1	£6.2 × × × ×	AGGCCCAGGG pplication 83906 RMATION:	2328GAGCACCTCC 721 LysAlaAspLeuGlyCys ::::	Db 2232 AATAGCGTCCTCTTCCTCCCCGTGGACCCCGAGGACTCGCCCCTT 2276  Qy 681 GlyLeuSerThrAspGlnThrGluThrSerSerLeuThrGluSerValSerSerSer 700
Qy 278 ThrThrArgLysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyPro 297	Qy 241 PropheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu 260	Qy 206	Oy  181 ArgThrArgAlacysAspLeuLeuGInProAspAspLeuAlacysLys	516 TGGCGTTTTACCTTCAGCCACTTTGTGGTTGACCCTGACCCAGGAATATGAGGTGACC  163 ValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe	123 ArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPheLysArg	Qy 89 HisAspGlnValAlaValThrIleLeuTrpSerProGlyAla 102	Qy 59 LYSTYKASPASHCYSThYTHTTYYLEULASHPYOVAIGLYLYSHISVAIILEALA 76	Qy 51 SerGlyLeu	DB:  Gaps:  US-10-616-788-2 (1-738) x US-08-978-773-3 (1-3223)  Oy  31 GlyArgAlaTrpGlyValAspThrCysGlyTrpArgGlyValGlyProAlaSerArgAsn 50

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  ----GlyGlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySer 640
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Patent No. 6096305
GENERAL INFORMATION:
                                                                                                                                                       TELEFAX: (206)
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: USSN 08/410,535
APPLICATION NUMBER: 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/620,694
FILING DATE: 21-MARCH-1996
APPLICATION NUMBER: USSN 08/538,765
FILING DATE: 7 AUGUST 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Yao, Zhengbin
APPLICANT: Spriggs, Melanie
APPLICANT: Fanslow, William
TITLE OF INVENTION: No. 6096305el Receptor That Binds IL-17
NUMBER OF SEQUENCES: 10
TOPOLOGY: 1
                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US FILING DATE: 23 MARCH CLASSIFICATION:
                          LENGTH: 3223 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                         NAME: Perkins, Patricia Ann
REGISTRATION NUMBER: 34,695
REFERENCE/DOCKET NUMBER: 26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE:
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CITY: Seattle
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US-09-022-253-9
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                                         163 Val-----ValProPheProSerIleLy8A8nGluSerA8nTyrHi8ProPhePhePhe 180
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ProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu 260
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                                                                           AlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly 240
                                                                                                                    AGCTTCACCCTGTGGAACGAATCTACCCATTACCAGATCCTGCTGACCAGTTTTCCCGCAC
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ProLeuArgTyrArgGluProValLeuGluLysPheAspSerGlyLeuValLeuAsnAsp 590
                                                                                                                                                                                                                                                                                                                                    MetAspAsnLeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGlu 520
                                                                                                                                                                                                                                                                                                                                                                           GAGGTCAGCTGTGACGGCGACGTCCCCGACCTGTTCGGCGCGGCGCCGCGGTACCCGCTC
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                                                                                                                                                                            GlyArgSerLeuTyrValAlaIleCygAsnMetHisGlnPheIleAspGluGluProAsp 558
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                                                                                                GGCAGGCAGCTCCGCGCCCTGGACAGGTTCCGGGACTGGCAGGTCCGCTGTCCCGAC 1841
                                                                                                                                                                                                                   CCGGGCCGCATGCACCGCGTAGGGGAGCTGTCGGGGGACAACTACCTGCGGAGCCCGGGC 1781
                                                                                                                                                                                                                                            ProGlyGlnHisThrArgGlnGly-----SerArgArgAsnTyrPheArgSerLysSer 538
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                                                             TGGTTCGAATGTGAGAACCTCTACTCAGCAGATGACCAGGATGCCCCGTCCCTGGACGAA 1901
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RESULT 11
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APPLICANT: Yao, Z
                                CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 01
PILING DATE: 23 MARCH 1995
                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating Sy
SOFTWARE: Microsoft Word for Apple,
CURRENT APPLICATION DATA:
                                                                                                         CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Spriggs, Melanie
APPLICANT: Fanslow, william
TITLE OF INVENTION: No. 6100235el Receptor That Binds
NUMBER OF SEQUENCES: 10
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                        STREET: 51
                                                                                                                                                                                      FILING DATE
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                                                                                                                                                                                                                                                                                                                                     COUNTRY: U
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51 University Street
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                                                       USSN 08/410,535
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e, Version 6.0.1
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-022-260-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 3223 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Perkins, Patricia Anne REGISTRATION NUMBER: 34,695 REFERENCE/DOCKET NUMBER: 2617 TELECOMMUNICATION INFORMATION: TELEPHONE: (206)587-0430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Human
STRAIN: IL-17 R (hCTLA8 receptor)
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                                                                                                                            Val-----ValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe 180
                                                                                                                                                                                                                                                                                                                                                      LeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSerGluGly 122
                                                   ArgThrArgAlaCysAspLeuLeuGlnProAspAsnLeuAlaCysLys-----
                                                                                                                                                                                                   ThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPheValLys 162
                                                                                                                                                                                                                                                                                ArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPheLysArg 142
                   TGGCGTTTTACCTTCAGCCACTTTGTG---GTTGACCCTGACCAGGAATATGAGGTGACC
                                                                                                                                                                                                                                                                                                                                                                                             LysTyrAspAsnCys-----ThrThrTyrLeuAsnProValGlyLysHisValIleAla 76
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Conservative:
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Indels:
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                                                                                                      AspTyrSerCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeu
                                                                                                                                                                                                                                                                                                                                                   GlnLysIleHisGluSerGlnPheIleIleValValCysSerLysGlyMetLysTyrPhe 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValGlnCysPheAlaTyrPheLeuGlnAspPheCysGlyCysGluValAlaLeuAspLeu
ProGlyGlnHisThrArgGlnGly-----SerArgArgAsnTyrPheArgSerLysSer 538
                               ATGGACAGGTTCGAGGAGGTG-----TACTTCCGCATCCAGGACCTGGAGATGTTCCAG
                                                                                                                                                                               ArgGlnAlaLysGlnSerSerSerAlaAlaLeuSerLysPheIleAlaValTyrPhe---
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                                                                                                                                                                                                                                         ArgGlySerGlyLysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLysLeu
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                                                           MetAspAsnLeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGlu
                                                                                       GAGGTCAGCTGTGACGGCGACGTCCCCGACCTGTTCGGCGCGGCGCCGCGGTACCCGCTC
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Sequence 9, Application US/09022259
Patent No. 6191104
GENERAL INFORMATION:
APPLICANT: Yao, Zhengbin
APPLICANT: Spriggs, Melanie
APPLICANT: Fanslow, William
TITLE OF INVENTION: No. 6191104el Re
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-022-259-9
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0
                                                                                                                                                       COUNTRY: U
                                                                                                                                                                                                                                           CITY: Seattle
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Percent Similarity:
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INFORMATION FOR SEQ ID NO: 9:
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STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA to m
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Human
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LENGTH: 3223 base pairs
TYPE: nucleic acid
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 0:
FILING DATE: 23 MARCH 1995
CLASSIFICATION:
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APPLICATION NUMBER:
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APPLICATION NUMBER: US
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STRAIN: IL-17 R (hCTLA8 receptor)
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REGISTRATION NUMBER: 34,695
REFERENCE/DOCKET NUMBER: 2617-B
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CLASSIFICATION:
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462
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                                                                                                                                                                                                        288
                                                                                                                                                                                                                                                                                                                                              189 CTGCGACTCCTGGACCACCGGGCGCTGGTCTGCTCCCAGCCGGGGCTAAACTGCACGGTC 248
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                                                                                                                                                                                                                                                                                                             59
                                                                                                                                                                                                                                                                                                                                                                               51 SerGlyLeu-----TyrAsnIleThrPhe 58
                              ArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPheLysArg 142
                                                                 GCCAGCATCCTGTACCTCGAGGGTGCAGAGTTATCTGTCCTGCAGCTGAACACCAATGAA 461
                                                                                                                                                                      HisAspGln-----ProGlyAla 102
                                                                                                                                                                                                                                                                             AAGAATAGTACCTGCCTGGATGACAGCTGGATTCACCCT------
                                                                                                                                                                                                                                                                                                            LysTyrAspAsnCys-----ThrThrTyrLeuAsnProValGlyLysHisValIleAla 76
                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCCCTGCTGGGGCTCCTGCTGCTCCTGGGCGTG-CTGGCCCCCGGGTGGCGCCTCC 188
CGTTTGTGCGTCAGG-----TTTGAGTTTCTGTCCAAACTGAGGCATCACCACAGGCGG
                                                                                                   LeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSerGluGly 122
                                                                                                                                                                                                        -----CGAAACCTGACCCCCTCCTCCCCAAAGGACCTGCAGATCCAGCTGCACTTTGCC 341
                                                                                                                                                                                                                                           GlyArgAlaTrpGlyValAspThrCysGlyTrpArgGlyValGlyProAlaSerArgAsn 50
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                1503 CACGGAAAGCCCGTGGGGGACCTGTTCACTGCAGCCATGAACATGATCCTCCCGGACTTC 1562
                                                                                                                                                                                                                                                                                                                                                                1218 AAGCCCAGGAAGGTCTGGATCTACTCAGCC---GACCACCCCCTCTACGTGGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1107 CTCATCGTCTGCATGACCTGGAGGCTAGCTGGGCCTGGAAGT------GAAAAATAC 1157
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                                             442 ArgGlySerGlyLysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLysLeu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              278 ThrThrArgLysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyPro 297
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            143 ThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPheValLys 162
                                                                                                                                                                           GlnLysIleHisGluSerGlnPheIleIleValValCysSerLysGlyMetLysTyrPhe 429
                                                                                                                                                                                                                                                                                                                            ValGlnCysPheAlaTyrPheLeuGlnAspPheCysGlyCysGluValAlaLeuAspLeu 393
                                                                                                                                                                                                                                                                                                                                                                                             -----LysValPheLeuCysTyrSerSerLysAspGlyGlnAsnHisMetAsnVal 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGluSerSerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgPro---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLys-----
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                                                                                                                                                                                                                          GTCCTGAAATTCGCCCAGTTCCTGCTCACCGCCTGCGGCACGGAAGTGGCCCTGGACCTG
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                                                                                                                                                      GAGATGGTGGAGAGCAACTCTAAGATCATCGTCCTGTGCTCCCGCGGCACGCGC-----
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                                                                                    GCCAAGTGGCAGGCGCTCCTGGGCCGGGGGGGCGCCTGTGCGGCTGCGCTGCGAC
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Sequence 9, Application US/09022257
PATENT NO. 6197525
GENERAL INFORMATION:
APPLICANT: Yao, Zhengbin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2130 GCGGTGGAGCCTGGGCCCCTGGCTGACGGTGCCGCAGTCCGGCTGGCACTGGCGGGGGGAG 2189
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     591 ValMetCysLysProGlyProGluSerAspPheCysLeuLysValGluAlaProValLeu 610
                                                                                                                                                                                                                                                                                    721 Гуваја вр Генсјусув 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               681 GlyLeuSerThrAspGlnThrGluThrSerSerLeuThrGluSerValSerSerSerSer 700
                                                                                                                                                                                                                                            CAGGCCCAGGGGGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                  GlyLeuGlyGluGluProProAlaLeuProSerLysLeuLeuSerSerGlySerCys 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATAGEGTECTETTE------CTEECEGTGGACCCCGAGGACTCGEECETT-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGCGCCGCAGCCCTCCACACCCTGGTGCTCGCCGCAGAGGAGGGGGGCCCTGGTGGCC 2129
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                                                                                                                                                                                                                                                                                                                                     -----GAGCACCTCGAAGGCTTGATGCTCTCGCTCTTCGAGCAGAGTCTGAGCTGC 2378
                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCAGCAGCACCCCATGGCGTCTCCTGACCTCCTTCCAGAGGACGTGAGG-----
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                           Spriggs, Fanslow,
                             Melanie
William
  No. 6197525el Receptor That Binds IL-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -GlyGlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySer 640
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYPOTHETICAL: NO ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS
LENGTH: 3223 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating Systems Apple Operating Systems Apple Operating Systems Apple Operating Systems Apple Operation Data:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: (206)587-0430
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NAME: Perkins, Patricia Anne
REGISTRATION UNMBER: 34,695
REFERENCE/DOCKET NUMBER: 2617-B
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CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER:
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TYPE: nucleic acid
STRANDEDNESS: single
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STATE: WA
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                                                                                                                   LysTyrAspAsnCys-----ThrThrTyrLeuAsnProValGlyLysHisValIleAla
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RESULT 13 US-09-022-257-9

APPLICANT: Spriggs APPLICANT: Fanslow TITLE OF INVENTION:

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42 ArgdlyserGlyLyeGlyGluteuPheLeuValAlavalSerAlaIleAlaGluLysteu 461   1503 CACGANAGCCCGTGGGGACTTGTTACTCACCTTTACTCACCTTTACTCACCTTTACACTAGACTTTC 1562   462 ArgGlnAlaLysGlnSerSerSerAlaAlaLeuSerLysPhelleAlaValTyrPhe- 480   1111	410 GlnLysIleHisGluSerGlnPheIleIleValValCysSerLysGlyMetLysTyrPhe 429 ::: ::        :::    ::: 1395 GAGATGGTGGAGAGCAACTCTAAGATCATCGTCCTGTGCTCCCGCGGCACGCGC 1448 430 ValAspLysAsnTyrLysHisLysGlyGlyGly

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                                                                     US-10-616-788-2 (1-738) x US-09-549-679-9 (1-3223)
                                                                                                                         Query Match:
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Best Local Similarity:
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Patent No. 6680057
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 08/620,694
FILING DATE: «Unknown»
APPLICATION NUMBER: USSN 08/410,535
FILING DATE: 23 MARCH 1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                HYPOTHETICAL: NO ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/549,679
PILING DATE: 14-Apr-2000
CLASSIFICATION: cUnknown>
PRIOR APPLICATION DATA:
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ADDRESSEB: Immunex Corporation
STREET: 51 University Street
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                     SEQUENCE DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: cDNA to mRNA
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Fanslow, William
TITLE OF INVENTION: No. 6680057el Receptor That Binds IL-17
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                               31 GlyArgAlaTrpGlyValAspThrCysGlyTrpArgGlyValGlyProAlaSerArgAsn
GGCCCCTGCTGGGGGCTGCTCCTGCTGCTCCTGGGCGTG-CTGGCCCCCGGGTGGCGCCTCC 188
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LOCATION: 93..2693
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OPERATING SYSTEM: Apple Operating System 7.5.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
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                  AGTGATGACACCAAATÁCACCGATGGCCTGCCTGCGTGACCTGATCCCCCCCACCGCTG 1217
                                                                                       CTCATCGTCTGCATGACCTGGAGGCTAGCTGGGCCTGGAAGT
                                                                                                                         ThrValMetCysArgLysLysGlnGlnGluAsnIleTyrSerHisLeuAspGluGluSer
                                                                                                                                                             CTGTGGGTGTACTGGTTCATCACGGGCATCTCCATCCTGGTGGTGGGGCTCCGTCATCCTG 1106
                                                                                                                                                                                              IleArgAlaMetAlaIleThrValProLeuValValIleSerAlaPheAlaThrLeuPhe 317
                                                                                                                                                                                                                                  GCGACTGTTTCCTGCCCAGAAATGCCAGACACTCCAGAACCAATTCCGGACTACATGCCC 1046
                                                                                                                                                                                                                                                                                                           CACCAAGTGCAGATCCAGCCCTTCTTCAGCAGCTGCCTCAATGACTGCCTCAGACACTCC
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; LOCATION:
US-08-620-694A-1
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                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 3288 base pair
                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 08/41
FILING DATE: 23 MARCH 1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 34,695
REFERENCE/DOCKET NUMBER: 26:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Spriggs, Melanie
APPLICANT: Fanslow, William
TITLE OF INVENTION: No. 5869286el Receptor That Binds IL-17
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                      ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                        HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 08/538,765
FILING DATE: 7 AUGUST 1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 98101
COMPUTER READABLE FORM:
                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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STREET: 51 Uni
CITY: Seattle
                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
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                                   NAME/KEY:
                                                                      STRAIN: HVS13
                                                                                                                                                                                                              TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
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                                                                                       ORGANISM:
                                                                                                                                                                             TOPOLOGY: linear
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Db 1065 TGCAGACTACATTCCCCTGTGGGTGTATGGCCTCATCACACTCATCGCCATTCTGCTGGT 1124	1005 GAGACACGCTGTGACTGTGCCCTGCCCCAAATCCCAAATACCACAGTTCCCAAGCCAGT	Qy 299 gAlaMetAlaIleThrValProLeuValValIleSer 311	Qy 279 rArgLysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyProIleAr 299 :::     :::::	Db 886 AGGCAAGAAGAATTCCATCAGCGAGCTAATGTCACATTCACTCTAAGCAAGTTTCACTGG 945	265 oGlyAspTyrIleIleGluLeuValAspAspThrAsnThrTh	Oy 248 sGlnGluGlnThrThrGluThrThrSerCysLeuLeuGlnAsnValSerPr 265	Db 766 CATCTGCGAGTGGACTTCACCCCTGTGGAATGAATGCACCCCCTACCAGGTCCTGCTGGAA 825	745 GTGGAGACCTTGGACACACAG	Qy 209 GlnHisGlySerAspMetGlnValSerPheAspHisAlaProHisAsnPheGlyPheArg 228	Qy 189 LeuGlnProAspAsnLeuAlaCysLysProPheTrpLysProArgAsnLeuAsnIleSer 208 ::::::::::::::::::::::::::::::::::::	Db 634 GACCCAAAACCACAAATCCAAGATCATCTTTGTGCCTGACTGTGAGGACAGCAAGATGAAG 693	Qy 172 GluSerAsnTyrHisProPhePheArgThrArgAlaCysAspLeuLeu 188	574 GATCCTGGCCAGGAGTATGAAGTGACTGTTCACCACCTGCCGGAAGCCCATCCCTGATGGG	OV 152 ASDMetiveDheGliThraspTvrDheVallvsValProDheDroSerTleIvsAsn 171	132 AspProLysGlnLeuAsnSerSerPheLysArgThrGlyMetGluSerGlnProPheLeu	Db 472 CAGCTGAACACCAATGAGCGGCTGTGTGTCAAGTTCCTGTCCATGCTGCAGCAT 531	412 IGGACCCIGGAGACAGAGCATCCTGAACCTCGAGGGTGCAGAGCTGTCCGTCC	98 TrpSerProGlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGlu	Db 355AATCTTAGTGTTTCCTCTACCCAGCACGAGAATTAGTCCCTGTGTTGCATGTTGAG 411	79 GlnAsnileThrileSerGlnTyrAlaCysHisAspGlnValAlaValThrileLeu	The contract of the contract o	רו ליפרעים במשורים במינים במינים במו המאוד המהמו הודה במינים	39 CygGlyTrpArgGlyValGlyProAlaSerArgAmSerGlyLeuTyrAsmIleThrPhe	-10-616-788-2 (1-738) x US-08-620-694A-1 (1-3288)	2 Gaps:	Best Local Similarity: 23.2% Mismatches: 321 Query Match: 7.6% Indels: 183	milarity: 300.00 Matches: 188	Length:
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2085 GCTATG-GCCACAGAGAGAGCTAGTGGCTCACACCCTCCAAAGCATGGTGCCTGCC	2025 CCTTGTGGTAGATGTCTGTGTCAGTGAGGAAGGAAAGTAGAATGGCAAAGCTGGACCCTCA 2089 609 lLeuGlyAlaThrGlyProAlaAspSerGlnHisGluSerGlnHisGlyGlyLeuAspGl 629	602 BLeuLysValGluAlaProVa	-GGGGAGGAATTGTCAAACAGCAGCCCCTGGTGCGGGAACTCCCATCTGACGGCTG	1914 CCAAGATCTTCCCTCCCTGGATGAAGAAGTGTTTGAAGACCCACTGCTGCCACCA 1968 582 eAspSerGlyLeuValLeuAsnAspValMetCysLysProGlyProGluSerAspPheCy 602	563 -GlnPheValProPheHisProProProLeuArgTyrArgGluProValLeuGluLysPh	1854 GAGTGGCAAACCCAGTGCCCCGACTGGTTCGAGCGTGAGAACCTCTGCTTAGCTGATGG 1913	1794 GGACAATTACCTGCAGAGCCCTAGTGGCCGGCAGCTCAAGGAGGCTGTGCTTAGGTTCCA 1853	530 gArgAsnTyrPheArgSerLysSerGlyArgSerLeuTyrValAlaIleCysAsnMetHi	512 BSERAZGABDHIBGIYLGUGINGINFTOGIYGINHIBTRIKATGGINGIYSEKAK 530	CAACATCACCTCCAGGTACCCACTCATGGACAGATTTGAGGAGGGTTTACTTCCG	uAspLeuSerThrLysTyrArgLeuMetAspAsnLeuProGlnLeuCysSerHisLeuHi	473 ruysenellealavaliyyeneaspiyrsercye Glüqiyaspvalerogiyilele 492  -    -	CATGAACATGATCCTGCCAGACTTCAAGAGGCCAGCCTGCTTCGG	453 aValSerAlaIleAlaGluLysLeuArgGlnAlaLysGlnSerSerSerAlaAlaLeuSe 473	1515 GCCTGCTGCTGCAGCTACGGTGTGACCACTGGAAGCCTGCTGGGGACCCTTTTCACTGCAGC 1574	CGAGGCACCCAAAGCAAAGCTGGAAAGCTATCTTGGGTTGGG	31yMetLysTyrPheV		1350 TGAAGTAGCCCTTGACCTCCTGGAAGAGCAGGTTATCTCTGAGGTGGGGGTCATGACCTG 1409 407 nValllaGlnIvgIleHisGlnSerGlnDheIleIleValValCysSe 423	387 sGluValAlaLeuAspLeuTrpGluAspPheSerLeuCysArgGluGlyGlnArgGluTr	1290 CCCCCTCTATGTGGAGGTGGTCCTTAAAGTTCGCCAGTTCCTGATCACTGCCTGTGGCAC 1349	367 yGlnAsnHisMetAsnValValGlnCysPheAlaTyrPheLeuGlnAspPheCysGlyCy 387		347 uProArgGluArgLeuArgProArgProLysValPheLeuCysTyrSerSerLysAspGl 367		uAsnIleTyrSerHisLeuAspGluGluSerSerGluSerSerThrTyrThrAlaAlaLe	 	321LysGlnGlnGl 327

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Search completed: March 1, 2006, 09:25:12 Job time : 383 secs

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-Q=/abse/ABSSWEB gpool/US10616788/runat 28022006 160428 14411/app query.fasta_1
-DB=GenEmb1 -QFMT=fastap -SUFFIX=rge -MINMATCH=0.1 -LOOFCL=0 -LOOFEXT=0
-UNITS-bits -START=1 -END=-1 -MATRIX-blosum62 -TRAUS-human40.cdi -LIST=45
-DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODEL-COAL
-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000 -HOST=abss05h
-USER-US10616788 @CGN 1 1 4939 @runat 28022006 160428 14411 -NCPU=6 -ICPU=3
-NO MMAP -NEG SCORES=0 -MAIT -DSPBHJOCK=100 -LONGLOG -DEV_TIMEOUT=120
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-YGAPOF=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
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Gallus g Gallus g Mus musc	AC125152 Mus muscu BC094998 Danio rer	Homo Ratt	AC097358 Homo sapi	364103 Danio	5426 Xen	AF424804 Mus muscu	AF494209 Mus muscu	Sequen	AJ508679 Gallus ga	Gallus		Sequ					Seq	82 ₩	-				Seque	Homo		7904 Seque	89047 Homo	BC038369 Homo sapi	0979 Seque	CS135272 Sequence	2973		73	AX364570 Sequence	94208

## ALIGNMENTS

	CDS		source	FEATURES		JOURNAL	TITLE	AUTHORS	REFERENCE				ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	rocus	AX251723	RESULT 1
/note="unnamed protein product" /codon start=1 /protein id="CAC93798.1" /db_xref="GI:15985082"	/db_xref="taxon:9606" 22>2235	/organism="Homo sapiens" /mol type="unassigned DNA"	13083	Location/Qualifiers	Amgen Inc. (US)	Patent: WO 0168859-A 1 20-SEP-2001;	Il-17 receptor like molecules and uses thereof	Jing, S.	1	Hominidae; Homo.	Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Homo sapiens	Homo sapiens (human)	•	AX251723.1 GI:15985081	AX251723	Sequence 1 from Patent WO0168859.	AX251723 3083 bp DNA linear PAT 05-OCT-2001		

Percent Similarity:
Beet Local Similarity:
Query Match:
DB: US-10-616-788-2 (1-738) x AX251723 Scores: AlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp ValLysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe LyBArgThrGlyMetGluSerGlnProPheLeuABnMetLyBPheGluThrAspTyrPhe GAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGAAGCAGCTCAACAGTAGCTTC GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe GlyAlaLeuGlyIleGluPheLeuLyBGlyPheArgValIleLeuGluGluLeuLyBSer GACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACGCCCAGAAT AspAsnCysThrThrTyrLeuAsnProValGlyLysHisValIleAlaAspAlaGlnAsn TrpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLysTyr TCGCAGCTGGCTGTGGCCGCGGGGTCCGGCCGCGCGTGGGGCGTCGACACCTGTGGC SerGlnLeuAlaValAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThrCysGly AGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAATCTAGCTTGTAAACCCCTTCTGG TGGAGGGGAGTGGGGCCAGCCAGCAGAAACAGTGGGCTGTACAACATCACCTTCAAATAT /translation="mapwlQlcsvfftvnaclngsQlavaaggsgrawgvdtcgwrgv
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stdqtetssltesvssssglgeeeppalpskllssgsckadlgcrsytdelhavap" 1.88e-302 3948.00 100.0% 100.0% (1-3083) Length:
Matches:
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Indels: Gaps: 0000 160 240 561 501 44] 381 120 321 100 80 60 141 681 621 200 180 261 201 40 S 밁 S 밁 S 밁 δ 밁 8 밁 S 밁 8 문 8 밁 Ś 밁 5 문 5 밁 δ 닭 S ᅜ 8 밁 . ₽ 밁 ð 밁 5 B S 밁 δ 1762 1642 1582 1522 1462 1402 1342 1282 1222 1162 1102 1042 561 541 521 501 481 461 441 421 401 381 361 341 982 922 301 862 802 601 321 281 261 742 241 GlnAsnValSerProGlyAspTyrIleIleGluLeuValAspAspThrAsnThrThrArg LysPheAspSerGlyLeuValLeuAsnAspValMetCysLysProGlyProGluSerAsp GluLygGlnPheValProPheHisProProProLeuArgTyrArgGluProValLeuGlu ATGGACAATCTTCCTCAGCTCTGTTCCCACCTGCACTCCGAGACCACGGCCTCCAGGAG GlyArgGlySorGlyLysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLys 460 ValCysSerLysGlyMetLysTyrPheValAspLysLysAsnTyrLysHisLysGlyGly PheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerGlnHis AAATTTGATTCGGGCTTGGTTTTAAATGATGTCATGTGCAAACCAGGGCCTGAGAGTGAC TCCCTATACGTCGCCATTTGCAACATGCACCAGTTTATTGACGAGGGGGGCCGACTGGTTC SerLeuTyrValAlaIleCysAsnMetHisGlnPheIleAspGluGluProAspTrpPhe CCGGGGCAGCACACGCGACAGGGCAGCAGAAGGAACTACTTCCGGAGCAAGTCAGGCCGG ProGlyGlnHisThrArgGlnGlySerArgArgAsnTyrPheArgSerLysSerGlyArg MetAspAsnLeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGlu GGCCGAGGCTCGGGGAAAAGGAGCTCTTCCTGGTGGCGGTGTCAGCCATTGCCGAAAAAG GTTTGTTCCAAAGGTATGAAGTACTTTGTGGACAAGAAGAACTACAAACACAAAGGAGGT AGAGAAGGGCAGAGAATGGGTCATCCAGAAGATCCACGAGTCCCAGTTCATCATTGTG ArgGluGlyGlnArgGluTrpVallleGlnLysIleHisGluSerGlnPheIleIleVal CTCCAGGACTTCTGTGGCTGTGAGGTGGCTCTGGACCTGTGGGAAGACTTCAGCCTCTGT LeuGlnAspPheCysGlyCysGluValAlaLeuAspLeuTrpGluAspPheSerLeuCys TGCTATTCCAGTAAAGATGGCCAGAATCACATGAATGTCGTCCAGTGTTTCGCCTACTTC CysTyrSerSerLysAspGlyGlnAsnHisMetAsnValValGlnCysPheAlaTyrPhe LysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyProIleArgAla CAAAATGTTTCTCCAGGGGATTATATAATTGAGCTGGTGGATGACACTAACACAAGA 620 1761 1701 1641 1581 1521 500 1461 480 440 1281 420 400 1161 1101 1041 600 540 520 1401 1341 1221 380 360 340 580 560 320 981 300 801 921 861 280

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746 GCACCGCACAACTTCGGCTTCCGTTTCTTCTATCTTCACTACAAGCACCTCCAAGCACGAAGCTCCGCTTCCGTTTCTTCTTCACTACAAGCTCAAGCACGAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAAGCACCAACAAC	OY 181 ATGINEAGY BASE DECLECIONE DAS	141 LysArgThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPhe	101 GlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSer 1	61 AspAsnCysThrTyrLeuAsnProValGlyLysHisValIleAlaAspAlaGlnAsn 8	Best Local Similarity: 99.5% Mismatches: 3 Query Match: 99.2% Indels: 0 DB: Gaps: 0 US-10-616-788-2 (1-738) x AX364576 (1-2341)  Oy   MethlaProTrpLeuGlnLeuCysSerValPhePheThrValAsmAlaCysLeuAsmGly 20

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GlyArgGlySerGlyLysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLys
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                                                                                                                                 GCCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCCGGCAGCCCCTCGGACATGCCGCGG
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                                                                                                                                                                                                                                                                                      PheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerGlnHis
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Matches:
Conservative:
Mismatches:
Indels:

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SerGlnLeuAlaValAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThrCysGly

40 60 20

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Gilbert, J.M. and Gorman, D.M.
Identification of novel IL-1
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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LeuGlnAspPheCysGlyCysGluValAlaLeuAspLeuTrpGluAspPheSerLeuCys 400	341 SerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgProLy8ValPheLeu 360	901 GIGGCCAICACAGIGCCACIGGIAGICAIAICGGCAITIGGGACGCTCTICACIGIGAIG 960 321 CysArgLysGlnGlnGluAsnIleTyrSerHisLeuAspGluGluSerSerGluSer 340	81 LysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyProIleArgAla 30	721 CÉTTTCAAGCGAAAGACTGTAAGCAGGAGCAGACTACAGAGATGACCAGCTGCCTTC 780  261 GlnAsnValSerProGlyAspTyrIleIleGluLeuValAspAspThrAsnThrThrArg 280	221 AlaProHisAsnPheGlyPheArgPheDheTyrLeuHisTyrLysLeuLysHisGluGly 240	201 LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis 220	61 VallyaValValProPheProScrIleLysAsmGluScrAsmTyrHisProPhePhePhe 18	41 LysargThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPhe 16	01 GGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGCTGAAGTCG 21 GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe	41 ATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCAGTCACCATTCTTTGGTCCCCA 30 01 GlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSer 12		41 TrpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLysTyr 60 
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RESULT 4 AF494208 AF494208 AF494208 AF494208 DEFINITION Homo sapiens interleukin 17 receptor-like protein long form (IL17RLM) mRNA, complete cds; alternatively spliced. ACCESSION AF494208	2101 GGCCTGGGTGAGGAAGCTCCTTCCTTCCAAGCTCCTCTCTCT	Qy 681 GlyLeuSerThrAspGlnThrGluThrSerSerLeuThrGluSerValSerSerSerSer 700		621 GluSergInHisGlyGlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySer 	OY  1741 AAATTTGATTCGGGCTTGTTTTAAATGATGTGAACCGGACCGACC	561 GluLysGlnPheValProPheHisProProProLeuArgTyrArgGluProValLeuGlu	Db 1561 CCGGGGCACACGCGACAGGCAGAGCAGAAGTACTTCCGGAGCAAGTCAGGCCGG 1620  Qy 541 SerLeuTyrValAlaIleCygAsnMetHisGlnPheIleAspGluGluProAspTrpPhe 560	Qy . 501 MetAspAsnLeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGlu 520	Qy 481 AspTyrSerCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeu 500	Db 1321 GGCCGAGGCTCGGGGAAAGGAGAGCTCTTCCTGGTGGCGGTGTCAGCCATTGCCGAAAAG 1380  Qy 461 LeuArgGlnAlaLysGlnSerSerSerAlaAlaLeuSerLysPheIleAlaValTyrPhe 480	1261 GTTTGTTCCAAAGGTATGAAGTACTTTGTGGACAAGAAGAACTACAAACACAAAGGAGGT 441 GlyArgGlySerGlyLy8GlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLy8	Db 1201 AGAGAAGGGCAGAGAGAGAGAGAGAGAGAGAGAGAGACCAGGAGTCCCAGTTCATTGTG 1260  Qy 421 ValCysSerLysGlyMetLysTyrDheValAspLysLysAsnTyrLysHisLysGlyGly 440

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1 (bases 1 to 4477)

Xiong, S., Zhao, Q., Rong, Z., Huang, G., Huang, Y., Chen Xiong, S. Chao, Q., Rong, Z. Huang, G., Huang, Z.
Liu, L. and Chang, Z.
hSef Inhibits PC-12 Cell Differentiation by Interfer hSef Inhibits PC-12 Cell Differentiation by Interfer Ras-Mitogen-activated Protein Kinase MAPK Signaling J. Biol. Chem. 278 (50), 50273-50282 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (22-MAR-2002) Tsinghua Institute of Genome Research, Department of Biological Sciences and Biotechnology, and School of Medicine, Tsinghua University, Beijing 100084, P.R. China Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xiong, S.Q., Huang, G.R., Zhao, Q.H., Chen, P.L., Chen, Y., Liu, L., Fu, X.Y. and Chang, Z.J. Direct Submission
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                SerGlnLeuAlaValAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThrCysGly
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NTTRKVMHYALKPVHSPWAGPIRAVAITVPLVVISAFATILFTVMCRKKQCHIYSHLD
EESSESSTYTMALPREKLRPRFKVFLCYSSKDGQNHMNVVQCFAYFLQDFCGCEVALD
LWEDFSLCREGQREWVIQKIHESQFIIVVCSKGMKYFVDKKNYKHKGGGRGSGKGELF
LVAVSAIAEKLRQAKQSSSAALSKFIAVYFRSKGGRSLYVAICNMHQFIDEEDDWFEKQFVP
FHPPPLRYREFVLEKFDSGLYLMDVMCKKGPESDFCLKVERAVLAGTGFADSQHESQH
GGLDQDGEARFALDGSAALQFLHTVKAGSFSDWFRDSGIYDSSVFSSLSLFLMMSGL
GGLDQDGEARFALDGSAALQFLHTVKAGSFSDWFRDSGIYDSSVFSSLSLFLMMSGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /gene="IL17RLM"
/note="contains a putative TIR domain and SH3 interaction domain; similar to sef; hIL-17RLM-L; alternatively
                                                                                                                                                                                                                                                                                                                                  STDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSCKADLGCRSYTDELHAVAPL"
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/product="interleukin 17
/protein_id="AAM74077.1"
/db_xref="GI:21667504"
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/note="IL17RLM-L"
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/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="3"
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PheLeuLysGlyPheArgValIleLeuGluGluLeuLysSerGluGlyArgGlnCysGln 126
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Sequence 4 from I
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AX364573.1 GI:18
      Presnell,S.R., Kuestner,R.E. and Ga
Human cytokine receptor
Patent: WO 0208259-A 4 31-JAN-2002;
ZymoGenetics, Inc. (US)
Location/Qualifiers
1. .2383
                                                                                 Homo sapiens
                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                            Hominidae;
                                                                                                                                                            ArgSerTyrThrAspGluLeuHisAlsValAlsPro
                                                                                                                                                                                         ProProAlaLeuProSerLysLeuLeuSerSerGlySerCysLysAlaAspLeuGlyCys
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organism="Homo sapiens"
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Percent Similarity:
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Query Match:
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                                     ProSerIleLysAsnGluSerAsnTyrHisProPhePheArgThrArgAlaCysAsp
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                                   CAGGGCAGCAGAAGGAACTACTTCCGGAGCAAGTCAGGCCGGTCCCTATACGTCGCCATT 1765
                                                       GlnGlySerArgArgAsnTyrPheArgSerLysSerGlyArgSerLeuTyrValAlaIle 546
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Patent: EP 1529843-A 15 11-MAY-2005;
Eli Lilly & Company (US)
Location/Qualifiers
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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Sequence 15
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AX392973.1
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleo
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel secreted proteins and their uses Patent: WO 0214358-A 15 21-FEB-2002; ELI LILLY AND COMPANY (US)
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MetAlaProTrpLeuGlnLeuCysSerValPhePheThrValAsnAlaCysLeuAsnGly
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LWEDFSLCREGQREWVIQKIHSQFIIVCSKGMKYFVDKXNYKKKGGGRGSGKGELF
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LVAVSAIAEKLRQAKQSSSAALSKFIAVYFDYSGCEGDVDGILDLSTKYRLMDNLSSAL
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RESULT 9	OY 719 rCyshysAlaAspLeudlyCysArgSerTyrThraspGluLeuH18A.aValAlaPro 738	699 rserglyL         2101 TTCAGGCC	679 2041	1981	Qy 639 ySerAlaAlaLeuGlnProLeuLeuHisThrValLysAlaGlySerProSerAspMetPr 659	Qy 619 nHisGluSerGlnHisGlyGlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGl 639	Qy 599 rAspPheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerG1 619	Qy 579 uGluLysPheAspSerGlyLeuValLeuAsnAspValMetCysLysProGlyProGluSe 599	Qy 559 pPheGluLysGlnPheValProPheHisProProLeuArgTyrArgGluProValLe 579	Qy 539 yArgSerLeuTyrValAlaIIeCysAsnMetHisGlnPheIleAspGluGluProAspTr 559	Qy 520 luPro-GlyGlnHisThrArgGlnGly-SerArgAsnTyrPheArgSerLysSerG1 539	Qy 501 MetAspAsnLeu-ProGlnLeuCysSerHis-LeuHisSerArgAspHisGlyLeuGlnG 520	Qy 481 ABDTyrSerCyBGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeu 500	Qy 461 LeuArgGlnAlaLysGlnSerSerSerAlaAlaLeuSerLysPheileAlaValTyrPhe 480	Qy 441 GlyArgGlySerGlyLysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLys 460	Qy 421 ValCysSerLysGlyMetLysTyrPheValAspLysLysAsnTyrLysHisLysGlyGly 440	Qy 401 ArgGluGlyGlnArgGluTrpVallleGlnLySIleHisGluSerGlnPheIleIleVal 420	OY 381 LeuGlnAspPheCysGlyCysGluValAlaLeuAspLeuTrpGluAspPheSerLeuCys 400

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  GI:18616355
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 GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe
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                                                             GlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSer
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                                          GGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGCTGAAGTCG
                                                                                                    ATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCAGTCACCATTCTTTGGTCCCCA
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GlyArgGlySerGlyLysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLys
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                                                                                                                                                           ArgGluGlyGlnArgGluTrpVallleGlnLysIleHisGluSerGlnPhelleIleVal
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er,G. ,N.K. ,F.	BC038369  Homo sapiens interleukin 17 receptor D, mRNA (cDNA (TMAGE:4830807), complete cds.  BC038369  BC038369: BC03869: BC038369: BC038369: BC038369: BC038369: BC038369: BC038369: BC038369: BC038369: BC03	721 LysAlaAspLeuGlyCysArgSerTyrThrAspGluLeuHisAlaValAlaPro 738 	701 GlyLeuGlyGluGluProProAlaLeuProSerLyBLeuLeuSerSerGlySerCy8 720 	681 GlyLeuSerThrAspGlnThrGluThrSerSerLeuThrGluSerValSerSerSerSer 700 	661 ABpSerGlyIleTyrABpSerSerValProSerSerGluLeuSerLeuProLeuMetGlu 680 	641 AlaAlaLeuGlnProLeuLeuHisThrValLysAlaGlySerProSerAspMetProArg 660 	621 GluSerGlnHisGlyGlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySer 640 	601 PheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerGlnHis 620 	581 LysPheAspSerGlyLeuValLeuAsnAspValMetCysLysProGlyProGluSerAsp 600 	561 GluLy8GlnPheValProPheHisProProProLeuArgTyrArgGluProValLeuGlu 580 	541 SerLeuTyrValAlaIleCysAsnMetHisGlnPheIleAspGluGluProAspTrpPhe 560 	521 ProGlyGlnHisThrArgGlnGlySerArgArgAsnTyrPheArgSerLysSerGlyArg 540 	501 MetAspAsnLeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGlu 520 

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 72 Row: h Column: 6 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 24308146.
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Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcia, A.M., Lu, X., Hulyk, S.W., J
Kowis, C.R., Sneed, A.J., Martin, R.G., Muzny, D.M.,
A.N., Gibbs, R.A.
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GQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIVVCSK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="IL17RD"
/note="synonyms: DKFZp434N1928, IL17RLM, FLJ35755,
IL-17RD, SEF"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone="MGC:42862 IMAGE:4830807"
/tissue_type="Testis"
/clone_tib="NIH_MGC_97"
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/db_xref="taxon:9606"
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SCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQGSRRNYFRSKSGR SLYVAICWNHQFIDEEPDWFEKQFVPFHPPPLRYBEPVLEKFDSGLVLNDVHCKPGPE SDFCLKVEAAVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQFLLHTVKAGSPS DWFRDSGIYDSSVPSSELSLFLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKL LSSGSCKADLGCRSYTDELHAVAPL"

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301 MetAlaIleThrValProLeuValValIleSerAlaPheAlaThrLeuPheThrValMet	281 LysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyPr	261 GlnAsnValSerProGlyAspTyrIleIleGluLeuValAspAspThrAsnThrT 	241 ProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu 	221 AlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly 	1 LysPro	LeuGlnF         GTTACAGO	161 VallysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe 	141 LysArgThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPh 	121 GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLys	101 GlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSe 	81 IleThrIleSerGlnTyrAlaCysHisAspGlnValAlaValThrIleLeuTrp 	61 ASDABNCYSTHITHITYILEUASNPIOVALGIYLYSHISVALIILEALAASDALAGINASN 	2 1	-2 (1-738)	re8: 7.36e-284 Length: 3716.00 Matches: arity: 99.9% Conservative: 99.7% Mismatches: 94.1% Indels: 8
AlaThrLeuPheThrValMet 320              CGACGCTCTTCACTGTGATG 1071	30 10	ABPABPThrABNThrThrArg 280             argacactaacacaacaaga 951	GluThrThrSerCysLeuLeu 260           gagacgaccagcTgcCTCCTT 891	TyrLysLeuLysHisGluGly 240                    ACAAGCTCAAGCACGAAGGA 831	MetGlnValSerPheAspHis 220 	YOASDASNLEUAIACYSLYSPYOPheTrp 200                          CGGACAATCTAGCTTGTAAACCCTTCTGG 711	ABNTYrHisProPhePhePhe 180                AATTACCACCCTTTCTTCTTT 651	LysPheGluThrAspTyrPhe 160             AAATTTGAAACGGATTATTTC 591	LyBGlnLeuAsnSerSerPhe 140 	IleLeuGluGluLeuLyeSer 120           ATACTGGAGGAGCTGAAGTCG 471	ValThrIleLeuTrpSerPro 100 	VallleAlaAspAlaGlnAsn 80             3TGATTGCTGACGCCCAGAAT 351	rArgAsnSerGlyLeuTyrAsnIleThrPheLysTyr 60 		4490 696 1 1 0

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                                                             AspSerGlyIleTyrAspSerSerValProSerSerGluLeuSerLeuProLeuMetGlu
                                                                                                                                     AlaAlaLeuGlnProLeuLeuHisThrValLysAlaGlySerProSerAspMetProArg
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Percent Similarity:
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Technology, Haifa 32000, Israel
Location/Qualifiers
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Altuvia, Y. and Ron, D.
Alternative splicing generates an isoform of the human Sef gene with altered subcellular localization and specificity with altered subcellular localization and specificity Proc. Natl. Acad. Sci. U.S.A. 101 (5), 1229-1234 (2004)
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                                                                                                        /product="SEF splice variant b"
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/db_xref="GI:42540832"
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QTTEMTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGFIRAVAITVPLV
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SCEGGVPGILDLSTKKRLMDNLFQLCSHLHSROHGLQBFGQHTRQGSRRAYFFSKSGR
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SDFCLKVEAAVUGATGFADSQHESQHGGLDQDTTSSLTESVSSSGLGEEEPPALFSKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /map="3p14.3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /chromosome="3"
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11 Inpringery Well-William Concentration of the Con	-2 (1-738) x AY489047 (1-2364)
1316 (MAGNAMOCHAMANANCHAMICHAMANCHAM	Qy 401 ArgGluGlyGlnArgGluTrpVallleGlnLygIleHisGluSerGlnPheIleIleVal 420

### STATES AND CONCOMPAGE AND CONCOM	Alignment Scores:  2.53e-283	TITLE Full-length cDNA sequences JOURNAL Patent: EP 138459-A 1429 07-MAY-2003; Helix Research Institute (JP); Research Association for Helix Research Institute (JP); Research Association for Biotechnology (JP) FEATURES Location/Qualifiers 1. 2894 /organism="Homo sapiens" /mol type="mRNA" /db_xref="taxon:9606"	ACCESSION AX747904  ACCESSION AX747904.1 GI:32132292  KEYWORDS  SOURCE  Homo sapiens (human)  ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;  Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;  REPERENCE 1  REPERENCE 1  AUTHORS Isogai, T., Sugiyama, T., Otsuki, T., Wakamatsu, A., Sato, H., Ishii, S., Yamamoto, J.I., Isono, Y., Hio, Y., Otsuka, K., Nagai, K., Irie, R.,  Tamechika, I., Seki, N., Yoshikawa, T., Otsuka, M., Nagahari, K. and
Oy  411 GlyArgGlySerGlyLysGlyGluLeuPheLeuValAlaYalSerAlaYalGluLys 460	CYS TIC		Qy 241 ProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu 260

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                              Ota,T., Suzuki,Y., Nishikawa,T., Otsuki,T., Sugiyama,T., Irie,R., Wakamatsu,A., Hayashi,K., Sato,H., Nagai,K., Khura,K., Makita,H., Sekine,M., Obayashi,M., Nishi,T., Shibahara,T., Tanaka,T., Ishil,S., Yamamoto,J., Saito,K., Kawai,Y., Isono,Y., Nakamura,Y., Nagahari,K., Murakami,K., Yasuda,T., Iwayanagi,T., Wagatsuma,M., Shiratori,A., Sudo,H., Hosoiri,T., Kaku,Y., Kodaira,H., Kondo,H., Sugawara,M., Takahashi,M., Kanda,K., Yokoi,T., Furuya,T., Kikawa,K., Pujimori,K., Tanai,H., Kimata,M., Watanabe,M., Murakawa,K., Pujimori,K., Tanai,H., Kimata,M., Watanabe,S., Yosida,M., Hotuta,T., Kusano,J., Kanehori,K., Takahashi,Fuji,A., Hara,H., Tanase,T., Nomura,Y., Togiya,S., Komai,F., Hara,R., Sasaki,N., Aptita,M., Imose,N., Musashino,K., Yuuki,H., Oshima,A., Sasaki,N., Aptika,S., Yoshikawa,Y., Musashino,K., Yuuki,H., Oshima,A., Sasaki,N., Sano,S., Moniya,S., Moniyama,H., Satoh,N., Takami,S., Goto,Y., Shimizu,F., Wakebe,H., Hishigaki,H., Watanabe,T., Sugiyama,A., Takemoto,M., Kawakami,B., Yamazaki,M., Watanabe,K., Kumagai,A., Itakura,S., Fukuzuni,Y., Fujimori,Y., Komata,K., Fujii,Y., Ozaki,K., Hirao,M., Ohmori,Y., Kawabata,A., Hikiji,T., Kobatake,N., Nasahina,Y., Mizuno,T., Morinaga,M., Sasaki,M., Watanabe,K., Najawa,T., Mizuno,T., Morinaga,M., Sasaki,M., Togashi,T., Nakajima,Y., Mizuno,T., Morinaga,M., Sasaki,M., Togashi,T., Nakajima,Y., Mizuno,T., Morinaga,M., Sasaki,M., Togashi,T., Nakajima,Y., N
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Oligo capping; fis (full insert sequence)
Homo sapiens (human)
Homo sapiens
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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Query Match:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (04-JUL-2002) Takao Isogai, FLJ Project(HRI Team); 2-6-7 Kazusa-Kamatari, Kisarazu, Chiba 292-0812, Japan (B-mail:genomics@hri.co.)p, Tel:s81-438-52-3975, Fax:81-438-52-3986) NEDO human cDNA sequencing project supported by Ministry of Recommy, Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology (RAB); cDNA library construction: Helix Research Institute (HRI) (supported by Japan Rey Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB, HRI, and Biotechnology Center of National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: HRI and RAB.
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                                                                                                          LysArgThrGlyMetGluSerGlnDroPheLeuAsnMetLysPheGluThrAspTyrPhe 160
                                                                                                                                                                                        GAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGAAGCAGCTCAACAGTAGCTTC
                                                                                                                                                                                                                       GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe 140
                                                                                                                                                                                                                                                                                                                                                                                                                                            IleThrIleSerGlnTyrAlaCysHisAspGlnValAlaValThrIleLeuTrpSerPro 100
                                                                              AAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATTTGAAACGGATTATTTC
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/mol_type="mRNA"
/db_xref="taxon:9606"
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                                                                                                 SerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgProLysValPheLeu
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                                                                                                                                                                       LeuArgGlnAlaLysGlnSerSerSerAlaAlaLeuSerLysPheIleAlaValTyrPhe
                                                                                                                                                                                                                    GlyArgGlySerGlyLysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLys
                                                                                                                                                                                                                                                                       ValCysSerLysGlyMetLysTyrPheValAspLysLysAsnTyrLysHisLysGlyGly
                                                                                                                                                                                                                                                                                                                         ArgGluGlyGlnArgGluTrpValIleGlnLysIleHisGluSerGlnPheIleIleVal
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CCGGGGCAGCACACGCGACAGGCAGCAGAACGAACTACTTCCGGAGCAAGTCAGGCCGG
              ProGlyGlnHisThrArgGlnGlySerArgArgAsnTyrPheArgSerLysSerGlyArg
                                                  ATGGACAATCTTCCTCAGCTCTGTTCCCACCTGCACTCCCGAGACCACGGCCTCCAGGAG
                                                                MetAspAsnLeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGlu
                                                                                                                                                    CTCCGCCAGGCCAAGCAGAGTTCGTCCGCGGCGCTCAGCAAGTTTATCGCCGTCTACTTT
                                                                                                                                                                                                                                                          GTTTGTTCCAAAGGTATGAAGTACTTTGTGGACAAGAAGAACTACAAACACAAAGGAGGT
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                                                                                                                         2 (bases 1 to 4478)
Xiong, S., Zhao, Q., Huang, G., Chen, P., Rong, Z., Ye, X., Chen, Y.,
Liu, L., Fu, X. and Chang, Z.
Direct Submission
Submitted (22-MAR-2002) Tsinghua Institute of Genome Research,
Department of Biological Sciences and Biotechnology, and School
Medicine, Tsinghua University, Beijing 100084, P.R. China
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 4478)

1 (bases 1 to 4478)

1 Xiong, S., Zhao, Q., Rong, Z., Huang, G., Huang, Y., Chen, P., Zhang, S., Liu, L. and Chang, Z.

Liu, L. and Chang, Z.

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4478 bp mRNA linear PRI 08-DEC-2003
Homo sapiens interleukin 17 receptor-like protein short form.
(IL17RLM) mRNA, complete cds; alternatively spliced.
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/organism="Homo sapiens'
/mol_type="mRNA"
/db_xref="taxon:9606"
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/note="IL17RLM-S"
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/note="contains a putative TIR domain and SH3 interaction
domain; similar to sef; hIL-17RLM-S; alternatively
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                                                GAAAAGCAGTTCCTTCCCTTCCATCCTCCACTGCGCTACCGGGAGCCAGTCTTGGAG
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Result
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-QC-/Abss/RB spool/US10616788/runat_28022006_160426_14399/app_query.fasta_1
-QC-/Abss/RB spool/US10616788/runat_28022006_160426_14399/app_query.fasta_1
-DB=N_Geneseq_-QFMT=fastap_-SUFFIX=rrng_-MINMATCH=0.1 -L\overline{\text{COPCL}}-0 -L\overline{\text{COPEXT}}=0
-UNITS=bits_-START=1 -END=-1 -MATRIX=blosum62 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL
-OCCALIGN=200 -THR_SCORE=pct_-THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL
-OUTFMT=pcb_-NORM=ext_-HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000 -HOST=abs805p
-USER=US10616788 @CCN_1 1_1096 @runat_28022006_160426_14399_-NCDP=6 -TCPU=3
-NO_MMAP_-NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG_-DEV_TIMEOUT=120
-MANN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
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9696 Human	ADP09696	12	3120	8.1	21.
Adk61414 Ovarian c	ADK61414	10	3120	8.1	321.5
Add25545 Binding d	ADD25545	10	3120	8.1	321.5
Human	ADV42775	14	60	8.1	321.5
	ACH39213	9	453	17.0	670
5' por	AAS16201	4	960	33.7	1329
9	ADX01629	13	1620	40.4	1595.5
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1 Novel	ADM43761	12	94	٠.	3248
	ABZ11243	თ	3948	82.3	3248
7 House	ADW76587	13	2224	84.7	4.3
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×	AAD51235	œ	4450	91.0	3594
9 Human	ADL71309	12	2319	٠	m
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5 Humar	AAD63615	10	2319	93.5	3690
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Human	ADA49781		2319		3690
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Human	ADW76619	13	4508	•	3706
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3 Human	LTI.	14	2786	•	3835.5
Human	AAS18134	σ	2786	97.2	3835.5
2082 Human	ABK62082	σ	4392	7	m
Human	ò	σ	2383	98.6	m
031 Human c	95031	σ	2383	98.8	
Adw23599 Human IL-	ADW23599	13	4477	99.0	3908

## ALIGNMENTS

AAS15346;

AAS15346 standard; cDNA; 3083

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Interleukin 17; hIL-17 receptor like protein; immunomodulatory; anti-diabetic; immunosuppressive; anti-microbial; hepatic; anabolic; anorectic; anti-alzheimer; s, ranti-parkinsonian; anti-convulsant; anti-asthmatic; dermatological; renal; osteopathic; vascular; cytostatic; anti-leukaemic; anti-infertility; ophthalmological; hepatitis; anorexia; cachexia; neuronal dysfunction; lung disease;
  WO200168859-A2.
                                                                                                                                                                                                                                                            DNA encoding human Interleukin 17 (hIL-17) receptor like protein.
                                                                                                                           Homo sapiens.
                                                                                                                                                     bone disease;
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                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                     vascular disorder; eye disorder; cancer; human; ss.
                                               /*tag= a
/product= "Interleukin 17 (IL-17) receptor like protein"
                                                                                 Location/Qualifiers
                            'note= "No stop codon given"
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                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC proteins may be used to prevent and treat diseases associated with CC inappropriate II-17 receptor like polypeptide (II17rip) expression. These cinclude, for example immune disorders (e.g. inflammation, diabetes and transplant rejection), infections (e.g. hepatitis and septicaemia), CC weight disorders (e.g. anorexia, cachexia and obesity), neuronal CC dysfunction (e.g. Alzheimer's disease, Parkinson's disease and epilepsy), CC lung disorders (e.g. cystic fibrosis, asthma and emphysema), skin disease (e.g. eczema and psoriasis), kidney disease (e.g. glomerulonephritis), CC bone diseases (e.g. osteoporosis and hypercalcaemia), vascular disorders (e.g. stroke and atherosclerosis, cancers (e.g. leukaemia, myeloma and Dreast cancer), reproductive disorders (e.g. laucaemia), vascular disorders (e.g. stroke and its complements may also used as disgnostic probes to detect and CC patients needing restorative therapy. The II17rlp may also be used as antigens in the production of antibodies against the proteins and in cassays to identify modulators of expression and activity. The anti-CC expression and activity. This sequence encodes the human Interleukin 17 (II-17) receptor like protein described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention describes novel nucleic acids encoding interleukin (IL) 17 receptor like polypeptides useful as vaccines and in gene therapy. These have immunomodulatory, anti-inflammatory, anti-diabetic, anti-microbial, immunosuppressive, hepatic, anabolic, anorectic, anti-alzheimer's, renal, anti-parkineonian, anti-convulsant, anti-asthmatic, dermatological, osteopathic, vascular, cytostatic, anti-leukaemic, anti-infertility and ophthalmological activities. The IL-17 receptor like nucleic acids and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for preventing, diagnosing and treating, psoriasis and glaucoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic acids encoding interleukin 17 receptor like polypeptides, useful for preventing, diagnosing and treating, e.g. leukemia, asthma, diabetes
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                                                                                   standard; DNA; 3083
                                                                                                                                            LysAlaAspLeuGlyCysArgSerTyrThrAspGluLeuHisAlaValAlaPro 738
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             variant SEQ
             ID NO: 3.
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ds; fibroblast growth factor; SEF; similar expression of FGF get
cytostatic; cardiovascular-gen.; antiarteriosclerotic; cardiant
vasotropic; hypotensive; nephrotropic; gene therapy; diagnosis;
prognosis; proliferative disorders; cardiovascular disorders;
                                                                                                                                                                                                                                                 disease;
                                                                                                                                                                                                                                                 glomerular disease; gene.
                                                                                                                                                                                                                                                              cardiant;
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Homo sapiens

Location/Qualifiers 22. .2241 /\*tag= /product= "SEF"

US2004235104-A1

07-MAY-2004; 2004US-00842006

08-MAY-2003; 2003US-0469522P

(MILL-) MILLENNIUM PHARM INC

Yang

2004-821320/81. )B; ADU69244.

New isolated SEF nucleic acid and polypeptide, useful for monitoring, treating, or diagnosing proliferative and/or differentiative disorders, e.g. ovarian cancer, breast cancer, or cardiovascular disorder including

Disclosure; SEQ ID NO 3; 46pp; English.

The invention relates to a novel isolated SEF (similar expression of FGF CC genes) nucleic acid molecule (I). An SEF of the invention has cytostatic, CC cardiovascular-gen., antiarteriosclerotic, cardiant, vasotropic, CC hypotensive, and nephrotropic accivity, and may have a use in gene CC therapy. The SEF nucleic acids and polypeptides can be used for CC diagnostic assays, prognostic assays, and monitoring clinical trials. CC They can also be used for treating a subject at risk of or susceptible to a disorder or having a disorder associated with aberrant or unwanted SEF CC expression or activity. The SEF molecules can also be used for CC adisorders, e.g. ovarian cancer, breast cancer, colon cancer, prostatic cancer, FGF related disorder, breast cancer, colon cancer, prostatic cancer, FGF related disorder, cardiovascular disorder including carteriosclerosis, coronary artery disease, ischemia, reperfusion injury, restanosis, arterial inflammation, hypertension, endothelial disorders, cand a kidney disorder, e.g. glomerulanephritis, vascular nephropathy, CC renal failure, or glomerular disease. The SEF molecules can also be used cdisease states, as markers of disease states, as markers for precursors of clisease states, as markers activity, or as markers of the phaemacogenomic profile of a subject. The present sequence represents a variant of the SEF nucleic acid shown in ADU69241.

Sequence 3083 BP; 782 ₽. 807 ü 767 ູດ 727 T; 0 u; 0 Other;

Percent Similarity:
Best Local Similarity:
Query Match:
DB: Alignment Мо : 0 3948.00 100.0% 100.0% 100.0% Length:
Matches:
Conservative:
Mismatches:
Indels: Gaps: 3083 738 0 0

US-10-616-788-2 (1-738) x ADU69243 (1-3083)

ई 밁 22 1 MetAlaProTrpLeuGlnLeuCysSerValPhePheThrValAsnAlaCysLeuAsnGly 81

321 CysarglysClnGlnGlnGlnAsnTleTyrSerHisLeuAspCluGluSerSerGluSer 340 321 CyslysClnGlnGlnClnAsnTleTyrSerHisLeuAspCluGluSerSerGluSer 340 321 TGCCGCAAGAAGCACAAGAAATTATTATTCACATTTAGATGAAGAAGCTTCTGAGTCT 1041 341 SerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgProLysValPheLeu 360	CAAAATGTTTCTCCAAGGGATTATATAATTGAGCTGGTGGATGACACTAACACAAGA E LYSVAlMetHiSTyrAlaLeuLysProValHisSerProTrpAlaGlyProIleArgAla 3	82 21 41 42	61 VallysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePh	101 GlyAlaLeuGlyIleGluPheLeuLy8GlyPheArgValIleLeuGluGluLeuLy8Ser 120	21 SerGInLeuAlaValAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThrCy8Gly 40
20 7 21 7 7 7 21 21 8ULT 3 A9SO35	Db 1882 didaigreadchafadeige 1941  Oy 641 AlaAlaLeuGlnProLeuLeuHisThrValLysAlaGlySerProSerAspMetProArg 660	581 LyspheAspSerGlyLeuValLeuAsnAspValMetCysLysProGlyProGluSerAsp	Cy 521 PTOGATY-INFINITATES INGLYS FRANCH SERVING STREET STATES FROM THE PROGRAMMENT OF TH		1162 CTCCAGGI 401 ArgGluGI 401 ArgGluGI 1222 AGAGAAGG 421 ValCysse 1211

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Best Local Similarity:
Query Match:
                                                                                                            US-10-616-788-2 (1-738) x ABA95035 (1-2341)
                                                                                                                                                                                                                                                                                          The invention relates to an isolated cytokine receptor polypeptide designated Zcytor18. The Zcytor18 polypeptides can be expressed by standard recombinant methodology. The polypeptides can be used to inhibit cell proliferation associated with psoriasis or tumour growth. The encoding nucleic acids are useful for providing Zcytor18 in vivo by gene therapy techniques. Zcytor18 oligonucleotide probes are useful for in vivo diagnosis, and the Zcytor18 probes and primers can be used to detect and localize Zcytor18 gene expression in tissue samples. The probes are also useful for detecting gross aberrations in chromosome 3 in which Zcytor18 gene resides. The Zcytor18 polymucleotides can also be used in linkage-based testing of pulmonary alveolar proteinosis, familial periodic fever and erythroleukemia, and erythroleukemia associated with polymorphisms of cytokine receptors. The present sequence represents a human Zcytor18 splice variant nucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New cytokine receptor polypeptide designated zcytor18, useful for inhibiting cell proliferation associated with psoriasis or tumor growth, and modulating immune system by binding to endogenous zcytor18 ligand.
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                      LeuGlnAspPheCysGlyCysGluValAlaLeuAspLeuTrpGluAspPheSerLeuCys 400
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    CTCCAGGACTTCTGTGGCTGTGAGGTGGCTCTGGGACCTGTGGGAAGACTTCAGCCTCTGT 1285
                                                                                  CysTyrSerSerLysAspGlyGlnAsnHisMetAsnValValGlnCysPheAlaTyrPhe
                                                                                                                                              SerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgProLy8ValPheLeu 360
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ds; gene; fibroblast growth factor; SBF; similar expression of FGF cytostatic; cardiovascular-gen.; antiarteriosclerotic; cardiant; vasotropic; typotensive; nephrotropic; gene therapy; diagnosis; prognosis; proliferative disorders; cardiovascular disorders; disease; glomerular disease.

Homo sapiens

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US2004235104-A1.
                                                        Location/Qualifiers 90. .2309
                             /product= "SEF"
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07-MAY-2004; 2004US-00842006.

08-MAY-2003; 2003US-0469522P

(MILL-) MILLENNIUM PHARM INC

2004-821320/81. DB; ADU69242.

New isolated SEF nucleic acid and polypeptide, useful for monitoring, treating, or diagnosing proliferative and/or differentiative disorders, e.g. ovarian cancer, breast cancer, or cardiovascular disorder including

Claim ID NO 46pp; English.

The invention relates to a novel isolated SEF (similar expression of FGF genes) nucleic acid molecule (I). An SEF of the invention has cytostatic, CC cardiovascular-gen., antiarterioscelerotic, cardiant, vasotropic, CC hypocensive, and nephrotropic activity, and may have a use in gene CC therapy. The SEF nucleic acids and polypeptides can be used for CC diagnostic assays, prognostic assays, and monitoring clinical trials. CC They can also be used for treating a subject at risk of or susceptible to a disorder or having a disorder associated with aberrant or unwanted SEF CC monitoring, treating, or diagnosing proliferative and/or differentiative disorders, e.g. ovarian cancer, breast cancer, colon cancer, prostatic cancer, FGF related disorder, cardiovascular disorder including CC arteriosclerosis, coronary artery disease, ischemia, reperfusion injury, CC restenosis, arterial inflammation, hypertension, endothelial disorders, and a kidney disorder, e.g. glomerulanephritis, vascular nephropathy, CC renal failure, or glomerular disease. The SEF molecules can also be used can markers of disorders or disease states, as markers for precursors of clisease states, as markers for precursors of comarkers of disorders or or as markers of the pharmacogenomic profile of cancer, or pharmacogenetic profile of the invention.

Sequence 4477 BP; 1133 1086 Ç 1141 ç 1117

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341 SerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgProLysValPheLeu 360 	321 CYBArgLyBLyBGlnGlnGlnAbnIleTyrSerHibLeuAbpGluGluGerSerGluSer 340 	301 MetAlaIleThrValProLeuValValIleSerAlaPheAlaThrLeuPheThrValMet 320 :::	281 LysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyProIleArgAla 300 	261 GlnAsnValSerProGlyAspTyrIleIleGluLeuValAspAspThrAsnThrThrArg 280 	241 ProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu 260 	. 221 AlaprohibasnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly 240 	201 LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis 220	181 ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp 200 	161 VallysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe 180 	141 LYBARGTHRG1YMetGluSerGlnProPheLeuAsnMetLYsPheGluThrAspTyrPhe 160 	121 GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe 140 	101 GlyAlaLeuGlyIleGluPheLeuLy8GlyPheArgValIleLeuGluGluLeuLy8Ser 120 	81 IleThrIleSerGlnTyrAlaCysHiBAspGlnValAlaValThrIleLeuTrpSerPro 100 	61 ASDASDCYSTHYTHYTYLEUASDPYOVAIGIYLYSHISVAIILEAIAASDAIAGIDASD 80 	41 TzpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLysTyr 60 	21 SerGlnLeuhlaValhlahlaGlyGlySerGlyhrghlaTrpGlyValhapThrCysGly 40	1 MetAlaProTrpLeuGlnLeuCysSerValPhePheThrValAsnAlaCysLeuAsnGly 20 	16-788-2 (1-738) x
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                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to a new isolated IL-17RLM polynucleotide. The polynucleotide encoding the IL-17RLM polypeptide is useful in preparing a composition for treating an individual in need of an increased or decreased level of IL-17RLM polypeptide, e.g. neurological or autoimmune disease, such as rheumatoid arthritis or asthma, or kidney-or testis-related carcinoma. The present sequence represents human IL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New polynucleotide encoding IL-17RLM polypeptide, useful in preparing composition for treating e.g., neurological or autoimmune disease, su as rheumatoid arthritis or asthma, or kidney- or testis-related
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Cytokine receptor; Zcytor18; cell proliferation; antipsoriatic; human; pulmonary alveolar proteinosis; familial periodic fever; antitumour; erythroleukemia; chromosome 3p14.3; gene therapy; ds.
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                                                                                                                                                                                (ZYMO ) ZYMOGENETICS INC
                                                                                                                                                                                            26-JUL-2000; 2000US-0220747P
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86. .2347
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/product= "Zcytor18"
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New cytokine receptor polypeptide designated zcytor18, useful for inhibiting cell proliferation associated with psoriasis or tumor growth, and modulating immune system by binding to endogenous zcytor18 ligand. Claim 5; Page 85-90; 119pp; English.

P-PSDB; ABB07626.

2002-217048/27.

Kuestner RE,

Gao

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The invention relates to an isolated cytokine receptor polypeptide designated Zcytor18. The Zcytor18 polypeptides can be expressed by standard recombinant methodology. The polypeptides can be used to inhibit cell proliferation associated with psoriasis or tumour growth. The encoding nucleic acids are useful for providing Zcytor18 in vivo by gene therapy techniques. Zcytor18 oligonucleotide probes are useful for in vivo diagnosis, and the Zcytor18 probes and primers can be used to detect and localize Zcytor18 gene expression in tissue samples. The probes are also useful for detecting gross aberrations in chromosome 3 in which Zcytor18 gene resides. The Zcytor18 polymucleotides can also be used in linkage-based testing of pulmonary alveolar proteinosis, familial periodic fever and erythroleukemia, and erythroleukemia associated with polymorphisms of cytokine receptors. The present sequence represents a human Zcytor18 nucleotide sequence

Sequence 2383 BP; 558 A; 679 ü 638 <u>ი</u> 508 1 0 U; 0 Other;

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CYCCAGAGAGAGAGCTCCGCCGCGCCGCCGAGGTCTTCTCTCGCTATTCCAGTAAAGAT G1YG1nAsnHisMetAsnValValGlnCyspheAlaTyrPheLeuGlnAspheCysG1y		247 CyslysGincluGlnThrThrGluThrThrSerCysLeuLeuclnAsnValSerProGly 266	207 IleSerGlnHisGlySerAspMetGlnValSerPheAspHisAlaProHisAsnPheGly 226	566 TCTCAACCTTTCCTGAATATGAAATTTGAAACGATTATTCGTAAAGGTTGTCCCTTTT 625  167 ProSerIleLysAsnGluSerAsnTyrHisProPhePhePheArgThrArgAlaCysAsp 186	107 PheLeuLysGlyPheArgValIleLeuGluGluLeuLysSerGluGlyArgGlnCysGln 126	206 TGGAGGATGAAAGCGGCTGCCCGACCCCGGCTTTGTGTTGTCTAATGAGGGAGTGGGCCA 265  47 AlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLysTyrAspAsnCySThrThTYr 66
Db 2246 CCTCCTGCCCTTCCAAGCTCCTCTCTCTGGTCAAAGCAGATCTTGGTTGC 2305  Qy 727 ArgSerTyrThrAspCluLeuHisAlaValAlaPro 738	Qy 667 Serservalprosersergluleuserleubroleumetgluglyteuserfhraegoln 686	1946 GCGGCTGTTCTTGGGGCAACCGGACCAGCCGACCACGACACAGAGAGTCAGCATGGGGGC 2  627 LeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySerAlaAlaLeuGlnProLeu 6	Qy 567 PheHisProProProLeuArgTyrArgGluProValLeuGluLysPheAsgSerGlyLeu 586	GlnGlySerArgAsnTyrPheArgSerLysSerGlyArgSerLeuTyrValAlalle 5	1526 AGTTCGTCCGCGGCGCTCAGCAAGTTTATCGCCGTCTACTTTGATTATTCCTGCGAGGGA 1 487 AspValProGlyIleLeuAspLeuSerThrLysTyrArgLeuMetAspAsnLeuProGln 5	Db 1286 TGTGAGGTGGCTCTGGACCTGTGGGAAGACTTCAGCCTCTGTAGAGAAGAGAGAA 1345  Qy 407 TrpVallleGlnLysIleHisGluserGlnPheIleIleValValCysSerLysGlyMet 426

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                                                                                                                                                                       Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New cytokine receptor polypeptide designated zcytor18, useful for inhibiting cell proliferation associated with psoriasis or tumor growth, and modulating immune system by binding to endogenous zcytor18 ligand.
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                               GlyGlnAsnHisMetAsnValValGlnCysPheAlaTyrPheLeuGlnAspPheCysGly 386
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                                                                      CTCCCAAGAGAGAGGCTCCGGCCGGCCGAAGGTCTTTCTCTGCTATTCCAGTAAAGAT 1225
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                                                  ArgSerTyrThrAspGluLeuHisAlaValAlaPro
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11-AUG-2000; 2000US-0224642P. 19-OCT-2000; 2000US-0241779P. 30-JUL-2001; 2001WO-US021124.

Micanovic R, 5 ξ Su ¥, Techang SR, Wang

(ELIL ) LILLY & CO ELI.

2002-304057/34. DB; AAU91330.

Novel polypeptides and polynucleotides of secreted proteins useful for treating various diseases such as multiple sclerosis, cancer, autoimmune diseases, osteoporosis, Alzheimer's disease and Parkinson's disease.

Claim 1; Page 166-171; 235pp; English

The invention relates to a novel human secreted polypeptide having CC sequence 90% identical to the polypeptide sequences of LP105, LP061, CC LP224, LP240, LP239(a), LP243(a), LP243(b), LP238, LP218), LP218(), LP251(a), CC LP252, LP239(b), LP232(a), LP255(a), LP244, LP186, LP251(b), LP251(a), CC LP252, LP239(b), LP232(a), LP255(a), LP244, LP186, LP251(b), LP255(b), or CC LP233(b). Also included are the nucleic acids encoding the LP proteins CC (including complement, fragments encoding mature forms of the proteins or the preparation of the protein, an anti-LP antibody, CC entraint), a vector comprising the nucleic acid, a host cell comprising CC the vector, the preparation of the protein, an anti-LP antibody, CC entragonists of LP and anti-LP-encoding mRNA ribozymes. The secreted CC protein or its agonist is useful in the manufacture of a medicament for CC entraing a mammal suffering from a disease (and in diagnosis), condition or disorder associated with aberrant levels of the secreted protein e.g. CC cancer, autoimmune disease, meningitis, encephalitis, noteable protein e.g. CC cancer, autoimmune disease, meningitis, encephalitis, namemia, sepsis, CC entered protein and infarction, mania, stroke, cardiovascular disease, CC cancer, autoimmatoid arthritis, hypothyroidism, anaemia, sepsis, CC allergic responses, multiple sclerosis, liver failure, haemorrhages, paranoia, obsessive compulsive disorder, autism, panic disorder, learning CC disabilities, adult respiratory distrates syndrome (ARDS). The secreted CC protein is further useful for identifying compounds that bind to the secreted protein. The present sequence encodes a novel secreted protein

1125 A; 1050 Ç 1101 <u>ن</u> 1116 T; 0 U; 0 Other; 밁 5 밁 ક В

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Qy         321 CyshrgLysGlnGlnGlnAsnIleTyrSerHisLeuAspGluGluSerSerGluSer         340	Oy 301 MetAlaIleThrValProLeuValValIleSerAlaPheAlaThrLeuPheThrValMet 320	Qy 281 LysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGlyProIleArgAla 300	Qy 261 GlnAsnValSerProGlyAspTyrileIleGluLeuValAspAspThrAsnThrThrArg 280	Qy 241 ProPheLy8ArgLy8ThrCy8Ly8GlnGluGlnThrThrGluThrThrSerCy8LeuLeu 260	Qy 221 AlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly 240	Oy 201 LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis 220	Qy 181 ArgThrArgAlaCysAspLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp 200	Qy 161 ValLysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe 180	Oy       141 LysargThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPhe 160	Qy       121 GluGlyArgGlnCyeGlnGlnLeuIleLeuLyeAspProLyeGlnLeuAsnSerSerPhe 140	Qy 101 GlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSer 120 [	Qy 81 IleThrIleSerGlnTyrAlaCysHisAspGlnValAlaValThrIleLeuTrpSerPro 100	OY 61 ASPASHCYSTHETHETYELGUASHPEOVALGLYLYSHLSVALILGALAASPALAGINASH 80	Oy 41 TrpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLysTyr 60	Oy 21 SerGinLeuhlaValAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThrCysGly 40	Oy 1 Met AlaProTrpLeuGlnLeuCysSerValPhePheThrValAsnAlaCysLeuAsnGly 20	Percent Similarity: 98.8% Conservative: 1 Best Local Similarity: 98.7% Mismatches: 5 Query Match: 97.7% Indels: 4 DB: 6 Gaps: 0 US-10-616-788-2 (1-738) x ABK62082 (1-4392)
Oy 679 tG1UG1YLeUSETIDTASDGINTNTGUUTNTSETSETLEUTNTGIUSETVALSETSETSE 699	1981 GCGGGACTCAGGCATCTATGACTCGTGTGCCCTCATCCGAGCTGTCTCTGCCACTGAT 2	1921 TAGCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGCAGCCCCTCGGACATGCC	1861	599 rAspPheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerGl	579 uGJULYBERBABBSETGIYJEUVALJEUABBVALMECCYBLYBETGGIYETGGIUSE	1681 GTTCGAAAAGCAGTTCCCTTCCATCCTCCACTGCGCTACCGGGAGCCAGTCTT 1681 GTTCGAAAAGCAGTTCCCTTCCATCCTTCCACTGCGCTACCGGGAGCCAGTCTT 1681 GTTCGAAAAGCAGTTCGTTCCATCCTTCCACTGCGCTACCGGGAGCCAGTCTT 1681 GTTCGAAAAGCAGTTCGTTCCATCCTTCCACTGCGCTACCGGGAGCCAGTCTT 1681 GTTCGAAAAGCAGTTCGTTCCATCCTTCCACTGCGCTACCGGGAGCCAGTCTT 1681 GTTCGAAAAAGCAGTTCGTTCATTCTTCATCTTCTTCTTCTTCTTCTTCTTCTTCTTC	539 YARGSERLGUTYY'GALALALIECYGARDMEHISGLIDPHGIIGARGAGGAGGAGCGACTG 1	150 10 ro-G. Yolmis in rafgalmaly-serigas gashiy rheard seriyaserba	501 MecAspAshLeu - ProGIRLeucySeserH15 - Leuni SeserAcgAspH18G1yLeuGIRG	481 AspTyrSerCysGluGlyAspValProGly1leLeuAspLeuSerThrLySTyrArgLeu   1	461 LeuArgGLTALALYSGLTSSCZSSCZALALALEUSSCZYSPREILEALAVALTYZPRE	1321 GGCCGAGGCTCGGGGAAAAGGAGAGCTCTTCCTGGTGGCGGTGTCAGCCATTGCCGAAAAG	421 VALCYBSETLYBGLYMETLYBTYTEPEVALABDLYBLYBLYBHABILYBHABLYBLYBHABLYBLYBLYBHABLYBLYBHABLYBHABLYBLYBHABL	401 ATGGTOG, YGTIMATGGTOTT DVALLIEGITING BLIEBLIEGIT DVALLIEGIT DV	101 According to the control of the	1081	961 TGCCGCAAGAAGCAACAAGAAAATATATACACATTTAGATGAAGAAGAGCTCTGAGTCT 341 SerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgProLysValPheLeu

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                                                                                                                              The invention relates to primate and rodent DNAX cytokine receptor subunit (DCRS) polypeptides and the polymucleotides encoding them. The receptors, or their portions may be useful as phosphate labelling enzymes to label general or specific substrates. The subunits may also be functional immunogens to elicit recognising antibodies, or antigens capable of binding antibodies. A combination, e.g., including a DCRS can be used as an immunogen for the production of antisera or antibodies capable of distinguishing between other cytokine receptor family members. A purified DCRS can also be used as a reagent to detect antibodies generated in response to the presence of elevated levels of expression, or immunological disorders which lead to antibody production to the endogenous receptor. This sequence represents cDNA encoding the human DCRS8 polypeptide
                                                                                                        Sequence 2786
                                                                                                                                                                                                                                                                                                                                            Isolated antigenic human or mouse DNAX receptor subunit-like polypeptide useful for detecting antibodies generated in response to presence of increased protein levels or immunological disorders.
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P-PSDB; AAU11355.
                                                                                                                                                                                                                                                                                                                     Claim 16; Page 21-25; 148pp; English.
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SerThrTyrThrAlaAlaLeuProArgGluArgLeuArgProArgProLysValPheLeu
                                                        CysArgLysGlysGlnGlnGluAsnIleTyrSerHisLeuAspGluGluSerSerGluSer
                                                                                                                                                                                                   CAAAATGTTTCTCCAGGGGATTATATATATATGAGCTGGTGGATGACACTAACACAACAAGA
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                                                                                                                      GACTCAGGCATCTATGACTCGTGTGCCCTCATCCGAGCTGTCTCTGCCACTGATGGAA
                                                                                                                                         AspSerGlyIleTyrAspSerSerValProSerSerGluLeuSerLeuProLeuMetGlu
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The invention relates to modulating (MI) activity of cell, by contacting cell with an agonist or antagonist of DNAX cytokine receptor subunit (DCRS9) or of interleukin (II)-17C where the cell modulates psoriasis, inflammatory bowel disorder (IBD), interstitial lung disorder, sathma or allergy, or atherosclerosis. Also provided are methods for treating (M2) the disorders which involves administration of the modulator and disgnosing (M3) a disorder as mentioned above that involves contacting a sample from a test subject with a binding composition that specifically binds to a polypeptide or nucleic acid of DCRS9 or IL-17C. (M1) is useful for modulating an activity of a cell. (M2) is useful for treating a subject suffering from a disorder such as psoriasis, IBD, interstitial lung disorder, asthma or allergy, or atherosclerosis, where the interstitial lung disorder is idiopathic pulmonary fibrosis, eosinophilic
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                                                                                                                                                                                                                                                                                                                                                                                                         Example 5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     granuloma, or hypersensitivity pneumonitis. The IBD is Crohn's disease ulcerative colitis. The present sequence represents a human DCRS8 polypeptide encoding cDNA.
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                  CAAAATGTTTCTCCAGGGGATTATATAATTGAGCTGGTGGATGACACTAACAACAAGA
                                                      CCTTTCAAGCGAAAGACCTGTAAGCAGGAGCAAACTACAGAGATGACCAGCTGCCTCCTT
                                                               ProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu
                                                                                        LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis
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                                                                                                                                                                         ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp
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                                      GluSerGlnHisGlyGlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySer
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                            GAGAGTCAGCATGGGGGCCTGGACCAAGACGGGGAGGCCCGGCCTTGCCCCTTGACGGTAGC
                                                              TTCTGCCTAAAGGTAGAGGCGGCTGTTCTTGGGGCAACCGGACCAGCCGACTCCCAGCAC
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RESULT 11
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Yamamoto J, Isono Y,
                          The invention discloses a polynucleotide comprising a sequence selected from 1970 fully defined nucleotide sequences which encode novel polypeptides. Also claimed is a polypeptide encoded by the polynucleotide or its partial peptide, an antibody binding to the polypeptide or peptide of the polynucleotide, immunologically assaying the polypeptide or peptide of the polynucleotide, immunologically assaying the polypeptide or peptide or peptide of the polynucleotide by contacting the polypeptide or with the antibody of the encoded protein, and observing the binding
                                                                                                                                                                                                                                                                                                              New polynucleotides and polypeptides, useful for developing a diagnostic marker or medicines for regulation of their expression and activity, or as targets of gene therapy.
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P-PSDB; ADB65245.
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25-JAN-2002; 2002US-00350978.
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                                                                                                                                                                                                                                                         Claim 1; Page; 222pp; English.
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expressible manner and an antisense polynucleotide. The oligonucleotide is useful as a primer for synthesising the polynucleotide, or as a probe for detecting the polynucleotide. The polynucleotides and encoded proteins are useful as pharmaceutical agents and many disease-related genes may be included in them, for developing a diagnostic marker or medicines for regulation of their expression and activity, or as targets of gene therapy. The genes are involved in tissue and/or cell regeneration. Membrane proteins, signal transduction-related proteins, transcription-related proteins, signal transduction-related proteins, neurological diseases, cancer, tumours. The cDNA may be used to regulate the activity or expression of the encoded protein to treat diseases. The sequence presented is a cDNA of the invention. Note: Some of the sequence data for this patent is not represented in the princed specification, but is based on sequence information supplied by the European Patent Office.

Sequence 2894 BP; 735 A; 751 C; 730 G; 678 T; 0 U; 0 Other;

Best Local Similarity: Query Match: DB:

3706.00 99.7% 99.4% 93.9%

Indels: Mismatches: Matches: Conservative:

2894 694 2 0

Percent Similarity:

Alignment Scores:

US-10-616-788-2 (1-738)

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280	GlnAanValSerProGlyAapTyrTleIleGluLeuValAapAapThrAanThrThrArg 2	261	Ş
869		810	밁
260	ProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu 2	241	Ş
809		750	망
240	AlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly 2	221	Ş
749		690	밁
220	LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis 2	201	S
689		630	망
200	ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp 2	181	S
629		570	망
180	ValLygValValProPheProSerIleLygAsnGluSerAsnTyrHisProPhePhePhe 1	161	Ş
569		510	밁
160	Ly8ArgThrGlyMetGluSerGlnProPheLeuAsnMetLy8PheGluThrAspTyrPhe 1	141	र्
509		450	뮍
140	GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe 1	121	ঠ
449	GGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTTAATACTGGAGGAGCTGAAGTCG	390	D D
120		101	S.
389		330	뮍
100	IleThrIleSerGlnTyrAlaCysHisAspGlnValAlaValThrIleLeuTrpSerPro	. 81	§
329		270	ర్జ
80	AspAsnCysThrThrTyrLeuAsnProValGlyLysHisValIleAlaAspAlaGlnAsn 8	61	र्
269	TGGCAGGGAGTGGGGCCAGCCAGAGAAACAGTGGGCTGTACAACATCACCTTCAAATAT 2	210	밁
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                                                                                                                                           GlyArgGlySerGlyLysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLys
                                         TTCTGCCTAAAGGTAGAGGCGGCTGTTCTTGGGGCCAACCGGACCAGCCGACTCCCAGCAC
                                                       PheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerGlnHis
                                                                                          AMATTTGATTCGGGCTTGGTTTTAMATGATGTCATGTGCAMACCAGGGCCTGAGAGTGAC
                                                                                                          LysPheAspSerGlyLeuValLeuAsnAspValMetCysLysProGlyProGluSerAsp
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                                             The invention relates to a novel human interleukin-17 (IL-17) receptor protein, the coding gene and application. The current sequence is that the human interleukin-17 receptor DNA of the invention.
  Sequence 4508
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                                                                                                                                                                                       Human Interleukin-17 receptor sample protein, coding gene
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US-10-616-788-2

361 CysTyrSerSerLysAspGlyGlnAsnHisMetAsnValValGlnCysPheAlaTyrPhe 380	321 CysArgLysLysGlnGlnGluAsnIleTyrSerHisLeuAspGluGluSerSerGluSer 340	281 LysValmethisTyrAlaLeuLysProValhisSerProTrpAlaGlyProIleArgAla 300	241 ProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThrSerCysLeuLeu 260		ArgThrArgAlaCysAspLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp 20	141 LysArgThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPhe 160	GGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGCTGAAGTCG GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe	81 IleThrIleSerGlnTyrAlaCyeHisAapGlnValAlaValThrIleLeuTrpSerPro 100	ASPASNCYSTNTTATYTLEUASNETOJABNSETOJYLEUTYTASILIEINTHELYSIYT	-2 (1-738) x ADW76619 (1-4508)
Oy 721 LysalaaspLeuGlyCysargSerTyrThraspGluLeuH1sAlaValAlaBro 738	701 GlyLeuGlyGluGluGluFroProAlaLeuProSerLygLeuLeuSerSerGlyGlill	2041 GCCGCCTGCAACCCCTGCACACGGTGAAAGCCCGGCAGCACTCCGACATGCCGCGGCAGCACGCTGCACACGGTGAAAGCCCGGCAGCACCCTCCGACATGCCGGCGGCAGCACGCGGACATGCCGGCGGACATGCCGGGGACATGCCGGGGACATGCAGGCGGGACATGCAGGAAAGCCCGGACATGAAGACTCGTCTGTGCCCTCTGTGCCATCTGATGGAAGCTGTCTCTGCCACTGATGGAAGCTGTCTATGACTCTATGACTCCGAGCTTGTTGCCACTGATGGAAGCTGTATGAAGACTCGTATGAAGACTCGTATGAAGACTCGTATGAAGACTCGTATGAAGACTCGAGCTGATGGAAGAGAGAG		1801 ĠÀÀÀÀ 581 Lyept       1861 AAATT	Qy 541 SerLeuTyrValAlaIleCysAsnMetHisGlnPheIleAspGluGluProAspTrpPhe 560	Db 1621 ATGGACAATCTTCCTCAGCTCTGTTCCCACCTGCACTCCCGAGACCACGGCCTCCAGGAG 1680  Qy 521 ProglyGlnHisThrArgGlnGlySerArgArgAsnTyrPheArgSerLysSerGlyArg 540	1501 CTCCC 481 AspTy               1561 GATTA	441 GlyArgGlySerGlyLyBGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLyB 	Db 1321 AGAGAAGGGCAGAGAGAATGGGTCATCCAGAAGATCCACGAGTTCCATCATTGTG 1380  Qy 421 ValCysSerLysGlyMetLysTyrPheValAspLysLysAsnTyrLysHisLysGlyGly 440	Db 1261 CTCCAGGACTTCTGTGGCTGTGAGGTGGCTCTGGACCTGTGGGAAGACTTCAGCCTCTGT 1320  Qy 401 ArgGluGlyGlnArgGluTrpVallleGlnLysIleHisGluSerGlnPheIleIleVal 420

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes novel polynucleotides and polypeptides isolated from human cDNA libraries which can be used for gene therapy or in vaccines. The polynucleotides of the invention and antibodies encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate polypeptide expression. The products of the invention may also be used to identify modulators of expression and activity and to down regulate expression and activity. The antibodies of the invention may also be used as diagnostic agents for detecting the presence of polypeptides in samples. This sequence encodes a polypeptide described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2406 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acids having the sequences of clones isolated from libraries different human tissues, useful in recombinant DNA methodologies.
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                                                                 ProGlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLys
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99US-0156503P.
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                    PheAspTyrSerCysGluGlyAspValProGlyIleLeuAspLeuSerThrLysTyrArg
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Human; Interleukin-17 receptor; II-17RH4; agonist; antagonist; ss; PRO20026; DNA 154095-2998; systemic lupus erythematosus; rheumatoid arthritis; osteoarthritis; diabetes mellitus; allergic disease; asthma; demyelinating disease; descentive cartilaginous disorder; transplantation associated disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGCCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGCAGCCCCTCGGACATGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerAlaAlaLeuGlnProLeuLeuHisThrValLysAlaGlySerProSerAspMetPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACGAGAGTCAGCATGGGGGCCTGGACCAAGACGGGGAGGCCCGGCCTGCCCTTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HisGluSerGlnHisGlyGlyLewAspGlnAspGlyGlwAlaArgProAlaLewAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTTCTGCCTAAAGGTAGAGGCGGCTGTTCTTGGGGCAACCGGACCAGCCGACTCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspPheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAlaAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAAATTTGATTCGGGCTTGGTTTTAAATGATGTCATGTGCAAACCAGGGCCTGAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluLysPheAspSerGlyLeuValLeuAsnAspValMetCysLysProGlyProGluSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCGAAAAGCAGTTCGTTCCATCCTCCTCCACTGCGCTACCGGGAGCCAGTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PheGluLysGlnPheValProPheHisProProProLeuArgTyrArgGluProValLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgSerLeuTyrValAlaIleCysAsnMetHisGlnPheIleAspGluGluProAspTrp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGCCGGGGCAGCACGCGACAGGCAGCAGCAGCAACTACTTCCGGAGCAAGTCAGGC
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/*tag= a
/product=
                                          Location/Qualifiers 70. .2255
                                                                                                                                                                                                                                                                           Interleukin 17 receptor,
"IL-17RH4"
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WO200146420-A2

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39 CysGlyTrpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPhe

8

-AlaTrpGlyValAsp-----Thr

AGTGGAGAGCAGGGAGTGGGGCCAGCCAGCAGAAACAGTGGGCTGTACAACATCACCTTC

US-10-616-788-2 (1-738)

x AAS09517

(1-2319)

Gaps:

24

AlaValAlaAlaGlyGlySerGlyArg----

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Query
                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                            The sequence (DNA 154095-2998) encodes a PRO polypeptide (PRO20026) which is the human Interleukin 17 receptor, IL-17RH4. A composition containing anti-polypeptide or individual components are useful for treating a mammal with an immune related disease, e.g. systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, a spondyloarthropathy, systemic sclerosis, an idiopathic inflammatory myopathy. Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, a chautoimmune or immune-mediated skin disease, contact dermatitis, an allergic disease e.g. food hypersensitivity, asthma, a transplantation associated disease, or a chronic inflammatory demyelinating polyneuropathy. Treating a degenerative cartilaginous disorder comprises administering a pRO1031 or PRO1122 polypeptide and other comprises administering a prosession of the diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chen J,
                                                                                                         Sequence 2319
                                                                                                                                                                                                                                                                                                                                                                       Claim
                                                                                                                                                                                                                                                                                                                                                                                             Novel PRO polypeptides homologous to interleukin-17, useful for the diagnosis and treatment of immune related disease e.g. rheumatoid arthritis and diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      P-PSDB;
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24-OCT-2000;
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02-JUN-2000;
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21-MAR-2000;
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18-FEB-2000;
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CK,
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L, Li H, Hillan I
CK, Williams PM,
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2000WG-US005841.
2000WG-US005841.
2000WS-0191007P
2000WG-US007532.
2000WG-US007532.
2000WG-US007532.
2000WG-US007532.
2000WG-US023328.
2000WG-US023328.
2000WG-US03328.
2000WG-US033678.
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                                                                                                         585 A;
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3690.00
96.0%
95.8%
93.5%
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lan KJ, Tumas D, Van Lookeren
PM, Wood WI, Yansura DG;
                                                                                                                                                                                                                                                                                                                                                                     English
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                                                                                                         602 G; 499 T;
                                                    Length:
                          Conservative: Mismatches:
              Indels:
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an Lookeren M,
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2319
702
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18
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Vandlen RL;
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G GlyCygGluValAlaLeuAspLeuTrpGluAspPheSerLeuCygArgGluGlyGlnArg 4		326 GlnGluAenIleTyrSerHisLeuAspGluGluSerSerGluSerSerThrTyrThrAla 345	306 ProLeuValVallleSerAlaPheAlaThrLeuPheThrValMetCysArgLysLysGln 325	32 GGGGATTATATAATTGAGCTGGTGGATGACACTAACACAAGAAAAGTGATGCATTAT 8 86 AlaLeuLysProValHisSerProTrpAlaGlyProIleArgAlaMetAlaIleThrVal 3	2 ACCTGTAAGCAGGAGCAAACTACAGAGATGACCAGCTGCCTCCAAAATGTTTCTCCA 8 6 GlyAspTyrIleIleGluLeuValAspAspThrAsnThrThrArgLysValMetHisTyr 2	226 GLYPheArgPhePheTyrLeuH.sTyrLySLeuLySH18G1UGLYProPheLySAxgLys 245	10HigGlySerAspMetGlnValSerPheAspHisAlaProHisAsnPhe 	99 PheTrpLysProArgAsnLeuAsnIleSerGln	PhePheArgThrArgAlaCy6AspLeuLeuLeuGlnProAspAsnLeuAllaCysLysPro	TyrPheValLysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhe 1	9 SerPheLysArgThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAsp 1	19 LysSerGluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSer 1	9 SerProGlyAlaLeuGlyIleGlubheLeuLyGGlyPheArgValIleLeuGluGluLeu 	79	59 LysTyrAspAsnCysThrThrTyrLeuAsnProValGlyLysHisVallleAlaAspAla 78 
RESULT 15 ACA89858 ID ACA8985 XX AC ACA8985 XX	p & p	5 & & &	P &	g Q	<b>5 5</b> 40	5 & &	රි යි රි	y dd dy	QQ QQ	D 99	B 8	д <b>Q</b>	p <i>Q</i>	p 9	Db
9858 standard; cDNA; 2319 BP. 9858;	2152 GAACCTCCTGCCCTTCCTTCCAAGCTCCTCTCTCTGGTCATGCAAAGCAGATCTTGGT 2211 726 CysArgSerTyrThrAspGluLeuHisAlaValAlaPro 738		66 AspSerSerValProSerSerGluLeuSerLeuProLeuMetGluGlyLeuSerThrAsp	646 LeuLeuHisThrVallysAlaGlySerProSerAspMetProArgAspSerGlyIleTyr 665 	1852 GAGGCGGCTGTTCTTGGGGCACCGGACCAGCCAGCACCAGCACGAGAGTCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCATCAGCAGCAGCAGCATCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC	2 TTGGTTTTAAATGATGTCATGTGCAAACCAGGGCCTGAGAGTGACTTCTGCCTAAAGGTA 6 GluAlaProValLeuGlyAlaThrGlyProAlaAspSerGlnHisGluSerGlnHisGly	566 ProbheHiaproproLeuArgyyrArgdiuProvallLeuGiuLysPheAspSerGly 585	46 IleCygAsnMetHisGlnPheIleAspGluGluProAspTrpPheGluLygGlnPheVal	526 ArgGlnGlySerArgArgArmTyrPheArgSerLypSerGlyArgSerLeuTyrValAla 545 	506 GlnLeuCygSerHisLeuHisSerArgAspHisGlyLeuGlnGluProGlyGlnHisThr 525	486 GlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeuMetAspAsnLeuPro 505	466 GlnSerSerAlaAlaLeuSerLysPheIleAlaValTyrPheAspTyrSerCysGlu 485 	446 LysGlyGluLeuPheLeuValAlaValSerAlaIleAlaGluLysLeuArgGlnAlaLys 465 	426 MetLysTyrPheValAspLysLysAsnTyrLysH1sLysGlyGlyGlyArgGlySerGly 445 	

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10-JUL-2003

(first entry)

CDNA

encoding PRO20026

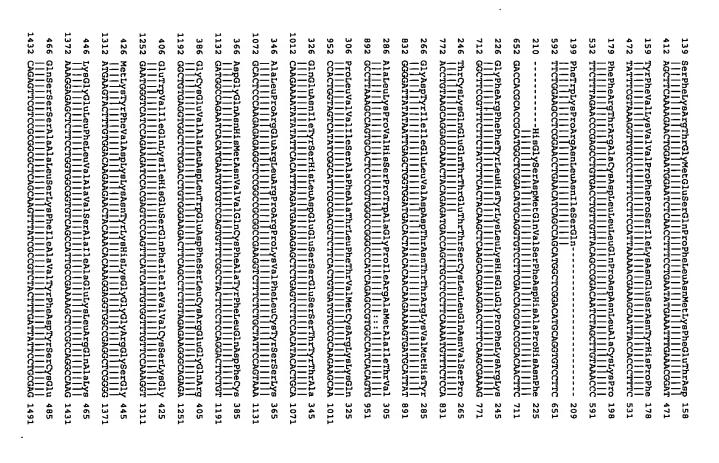
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18-FEB-2000
01-MAR-2000
02-MAR-2000
02-MAR-2000
21-MAR-2000
02-UN-2000
02-UN-2000
22-UN-2000
24-AUG-2000
24-CCT-2000
26-CCT-2000
                                                                                                                                                                                        Gurney A,
Watanabe C
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21-APR-1999;
26-APR-1999;
14-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sjogren's syndrome; sarcoidosis; autoimmune haemolytic anaemia; thyroiditis; diabetes mellitus; immune-mediated renal disease; demyelinating disease; duillain-Barre syndrome; hepatobliary disease; hepatitis; inflammatory bowel disease; Whipple's disease; psoriasis; immune-mediated skin disease; erythema multiforme; contact dermatitis; allergic disease; asthma; atopic dermatitis; food hypersensitivity; urticaria; immunologic disease of the lung; eosinophilic pneumonia; idiopathic pulmonary fibrosis; transplantation associated disease;
The invention relates to a nucleic acid having similarity to interleukin-
17 (IL-17) or IL-17 receptor comprises at least 80% nucleic acid sequence
identity to a nucleotide sequence which: (a) encodes a polypeptide having
                                                                                           New PRO polypeptides and polynucleotides homologous to interleukin-17, useful for treating e.g. systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, or systemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-JUN-1999;
23-DEC-1999;
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                                                      Claim
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                                                                                                                                                  2003-428843/40.
DB; ABU89705.
                                                     2; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ss; gene; interleukin 17; IL-17; IL17 receptor; angiogenesis;
hocyte proliferation; inflammatory cell infiltration;
related disorder; systemic lupus erythematosus; osteoarthritis;
                                                                                                                                                                                                                                               GENENTECH
                                                                                                                                                                                        Filvaroff E, Fong
, Li H, Hillan K,
C, Williams PM, V
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2000US-0191007P.
2000WO-US007532.
2000WO-US015264.
2000US-0213807P.
2000US-0242837P.
2000US-0242837P.
2000US-0244072P.
2000WO-US030873.
2000WO-US03646P.
2000WO-US03646P.
2000WO-US036459.
2000WO-US034956.
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2000WO-US004341
2000WO-US005601
                                                     17; 129pp; English.
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99US-00311832
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99WO-US010733.
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                                                                                                                                                                                                                                               INC.
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K, Tumas D, Vaniou...
Yansura D;
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mas D, Vanlookeren
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ookeren M, Vandlen R;
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CC PTA-5591. Also included are expression vectors, host cells, encoded CC proteins, chimaeric proteins, antibodies, ant/agonists, compounds CC inhibiting the expression of S1-58 or activity (or mimicking the activity of pl-18, stimulating/inhibiting the proliferation of T-lymphocytes CC of) of pl-18, stimulating/inhibiting the proliferation of T-lymphocytes CC using the polypeptides or ant/agonists, enhancing the infiltration of CC inflammatory cells into a tissue of a mammal by administering a PRO1031 polypeptide or antagonist in a mammal by compounds are useful cc polypeptide, its an agonist or antagonist in a mammal by administering a PRO1031 polypeptide, its ant/agonist or an anti-PRO1031 cc antibody. The proteins, antibodies, ant/agonist or an anti-PRO1031 cc erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic cc inflammatory myopathy, systemic sclerosis, an idiopathic carthritis, autoimmune haemolytic anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, a cdemyelinating disease of the central or peripheral nervous system, cu diopathic demyelinating polyneuropathy, Guillain-Barre syndrome, a chronic inflammatory demyelinating polyneuropathy, a hepatobiliary children chancillain. disease, infectious or autoimmune chronic active hepatitis, primary biliary cirrhosis, gramulomatous hepatitis, sclerosing cholangitis, inflammatory bowel disease, gluten-sensitive enteropathy, whipple's disease, an autoimmune or immune-mediated skin disease, a bullous skin disease, erythema multiforme, contact dermatitis, psoriasis, an allergic disease, asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity, urticaria, an immunologic disease of the lung, eosinophilic pneumonia, idiopathic pulmonary fibrosis, hypersensitivity pneumoniatis, a transplantation associated disease, graft rejection or graft-versus-host disease. The present sequence encodes an IL17 or IL17 P8), lacking or having its associated signal peptide; (b) encodes an extracellular domain of P1-P8 lacking its associated signal peptide; (c consists of a sequence of appearing at a SCA89850-ACA89853 and ACA89855-ACA89853 and of the full-length coding sequence of selected from S1-S8, and of the CDNA deposited under ATCC accession number 209866, 203552, PTA-1185, PTA-2108, PTA-202, PTA-1535, PTA-1182 Sequence a sequence of appearing as ABU89697-ABU89700 and ABU89702-ABU89705 P8), lacking or having its associated signal peptide; (b) encodes a 2319 homologue BP; 585 A; of the invention 633 ü 602 ဂ ဂ 499 7 0 U; 0 Other; -1ª <u>0</u> õ

Percent Similarity:
Best Local Similarity:
Query Match:
DB: 8 ঠ 밁 .8 밁 S 밁 ঠ 밁 ঠ 밁 US-10-616-788-2 (1-738) Alignment Scores: 292 232 172 112 99 79 59 39 52 24 LysSerGluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSer GlnAsnIleThrIleSerGlnTyrAlaCysHisAspGlnValAlaValThrIleLeuTrp CysGlyTrpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPhe AlavalAlaAlaGlyGlySerGlyArg-----AlaTrpGlyValAsp-----Thr SerProGlyAlaLeuGlyIleGluPheLeuLy8GlyPheArgValIleLeuGluGluLeu CAGAATATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCAGTCACCATTCTTTGG AAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACGCC LysTyrAspAsnCysThrThrTyrLeuAsnProValGlyLysHisValIleAlaAspAla AGTGGAGAGCAGGAGTGGGGCCAGCCAGCAGAAACAGTGGGCTGTACAACATCACCTTC TCCCCAGGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGCTG 3690.00 96.0% 95.8% 93.5% x ACA89858 (1-2319)Length: Matches: Conservative: Mismatches: Indels:

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'26 CyBArgSerTyrThrAspGluLewHisAlaValAlaPro 738 	06 GluProProAlaLeuProSerLysLeuLeuSerSerGlySerCysLysAlaAspLeuGly 725 	86 GlnThrGluThrSerSerLeuThrGluSerValSerSerSerSerGlyLeuGlyGluGlu 705 	6 AmpSerSerValProSerSerGluLeuSerLeuProLeuMetGluGlyLeuSerThrAmp 685	46 LeuLeuHisThrValLysAlaGlySerProSerAspMetProArgAspSerGlyIleTyr 665 	26 GlyLeuAspGlnAspGlyGluAlaArgProAlaLeuAspGlySerAlaAlaLeuGlnPro 645	06 GluAlaProValLeuGlyAlaThrGlyProAlaAspSerGlnHisGluSerGlnHisGly 625	86 LeuValLeuAsnAspValMetCysLysProGlyProGluSerAspPheCysLeuLysVal 605 	6 ProPheHisProProProLeuArgTyrArgGluProValLeuGluLysPheAspSerGly 585	46 IleCygAsnMetHisGlnPheIleAspGluGluProAspTrpPheGluLysGlnPheVal 565	6 ArgGlnGlySerArgArgArnTyrPheArgSerLysSerGlyArgSerLeuTyrValAla 545 	6 GlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGlnGluProGlyGlnHisThr 525	6 GlyAspValProGlyIleLeuAspLeuSerThrLysTyrArgLeuMetAspAsnLeuPro 505 

Search completed: March Job time : 1064 secs 2006, 08:31:20

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-MODEL=frame+ p2n.model -DEV=xlh
-Q=/abss/ABSSWEB_spool/US10616788/runat_28022006_160430_14453/app_query.fasta_1
-Q=/abss/ABSSWEB_spool/US10616788/runat_28022006_160430_14453/app_query.fasta_1
-DB=EST -CPMT=fastap -SUFFIX=rst -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45
-DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL
-OUTFNT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -HOST=abs807
-USER=US10616788_@CGN 1_1_5315 @runat_28022006_160430_14453 -NCPU=6 -ICPU=3
-NO_MMAP -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV_TIMEOUT=120
-MARN_TIMEOUT=30 -THREADS=1 -XGAPDP=10 -XGAPEXT=0.5 -FGAPDP=6 -FGAPEXT=7
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Listing first 45 summaries
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                   3698
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561	8561	N	w	•	702	3
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659	CG4659	10	718	•	715.5	41
	904	σ	474	•	723	40
BJ627924	2792	w	644	18.5	731	39
CK016475	01647	7	874	•	734.5	38
CA987808	CA987808	σ	862	18.7	736.5	37
4.1	BX773195	σı	812	18.9	747.5	36
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CC185174	17	9	1095	20.3	800	
CN302483	CN302483	7	462	20.4	804	
AW645591	AW645591	بر	627	20.4	806	
BQ734807	BQ734807	v	1010	٠	815	30
BY726061	BY726061	თ	667	21.6	853.5	29
٠,	CA789786	σ	836	•	863	28
_	BQ830554	ហ	548	•	873	27
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DR003317	DR003317	œ	494	22.5	890	25
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· BB616055	BB616055	N	649	23.7	937	22
CJ024557	CJ024557	7	803	23.8	941	21
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FEATURES					COMMENT		JOURNAL	TITLE	CONSRIM			AUTHORS	REFERENCE				ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	LOCUS	HSM805220	PRSIT.T 1
Location/Qualifiers	Please contact RZPD for ordering: http://www.rzpd.de/cgi-bin/products/cl.cgi?CloneID=DKFZp434L0320 Further information about the clone and the sequencing project is available at http://mips.gsf.de/projects/cdna/.	Ressourcenzentrum fuer Genomforschung GmbH in Berlin, Germany.	sequencing consortium of the German Genome Project.	sequenced by Medigenomix (Martinsried/Germany) within the cDNA	Clone from S. Wiemann, Molecular Genome Analysis, German Cancer	Neuherberg, GERMANY	Submitted (20-JAN-2005) MIPS, Ingolstaedter Landstr.1, D-85764	Direct Submission	The German cDNA Consortium	Wiemann, S.	Mewes, H.W., Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and	Ottenwaelder, B., Obermaier, B., Deutschenbaur, S., Schaipp, A.,	1 (bases 1 to 2406)	Hominidae; Homo.	Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Homo sapiens	Homo sapiens (human)	HTC.	AL833913.1 GI:21739453	AL833913 ·	ens mRNA; cDNA DKFZp434L0320 (from	HSM805220 2406 bp mRNA linear HTC 20-JAN-2005		

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Query Match:
DB:
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               TTCGTAAAGGTTGTCCCTTTTCCTTCCATTAAAAACGAAAGCAATTACCACCCTTTCTTC
                              PheValLysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhe
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                                                                                                                                                  SerGluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSer
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VPLVVI SAFATLFTVMCRKKQOENI YSHLDEESSESTYVAALFRERLFRRFKVFLCY
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GSPSDMPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPAL
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DH10B; sites_NotI + Sall"
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                                              GluProGlyGlnHisThrArgGlnGlySerArgArgAsnTyrPheArgSerLysSerGly 539
                                                                                                      LeuMetAspAsnLeuProGlnLeuCysSerHisLeuHisSerArgAspHisGlyLeuGln 519
                                                                                                                                               TTTGATTATTCCTGCGAGGGAGACGTCCCCGGTATCCTAGACCTGAGTACCAAGTACAGA
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          2 (bases 1 to 1677)

Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A., Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J., Adams,M.D. and Cargill,M.

Direct Submission

Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA

This sequence was made by sequencing genomic exons and orderin them based on alignment.
                                                                                                                                                                        Inferring nonneutral evolution from gene trios Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                 Hominidae; Homo.

1 (Dases 1 to 1677)

Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, P., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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 AGAGAATGGGTCATCCAGAAGATCCACGAGTCCCAGTTCATCATTGTGGTTTGTTCCAAA
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/mol type="genomic DNA"
/db xref="taxon:9606"
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/locus_tag="HCM3241"
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1 (bases 1 to 1677)

Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
Adams, M.D. and Cargill, M.
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PheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGlyProPheLysArg
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Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:9598"
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          ProLeuLeuHisThrValLysAlaGlySerProSerAspMetProArgAspSerGlyIle
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Civello,D.R., Lu,F., Murphy,B., g,X.H., White,T.J., Sninsky,J.J.,	Todd, M.A., Ferriera, S.	
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neutral evolution from human-chimp-mouse orthologous	TITLE Inferring n	н
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CJ025168 full-length enriched swine cDNA library, adult trachea Sus scrofa cDNA clone TCH01B080037 5', mRNA sequence.
CJ025168.1 GI:54533576
EST.
SST.
Sus scrofa (pig)
Sus scrofa

Email: huenishi@affrc.go.jp
EST project with full-length enriched cDNA libraries carried
Animal Genome Research Program (Japan) by National Institute
Agrobiological Sciences and STAFF-Institute
Single pass sequencing of clones derived from oligo-capped cl
                                                                                                                                  Animal Genome Laboratory, Genome Research Department National Institute of Agrobiological Sciences 2 Ikenodai, Tsukuba, Ibaraki 305-8602, Japan Tel: +81-29-838-8627
Fax: +81-29-838-8627
                                                                                                                                                                                                                                                                                                                           Uenishi,H., Eguchi,T., Suzuki,K., Sawazaki,T., Cokumura,N., Hamasima,N. and Awata,T.
PEDE (Pig EST Data Explorer): construction of a derived from porcine full-length cDNA libraries Nucleic Acids Res. 32 (1), D484-D488 (2004)
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                                                                                                                                                                                                                                                                                                                                                                                                                      GlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSer
                   AlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGly
                                                                                                                                                                                                                               ValLysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe
                                                                                                                                                                                                                                                                                     LysArgThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPhe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspAsnCysThrThrTyrLeuAsnProValGlyLysHisValIleAlaAspAlaGlnAsn
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GCGCCACATACCTTCGGCTTCCGTTTCTTTATCTTCACTACAAGCTCAAGCACGAAGGA
                                                                                 LysProArgAsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHis
                                                                                                                                 AGAACCCGCACCTGTGACCTGCTATTACAGCCGGACAACCTGGCCTGTAAACCCTTCTGG
                                                                                                                                                              ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp
                                                                                                                                                                                                                                                                                                                                  GAAGGAAGACAGTGCCAACAACTGATTCTGAAGGACCCGAAGCAGCTCAACAGTAGCTTC
                                                                                                                                                                                                                                                                                                                                                                GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe
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                                                              AAGCCTCGGAACCTCAACATCACCCAACATGGCTCAGACATGCAGGTGTCCTTCGACCAC
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quality bases were trimmed based on the quality values.
Location/Qualifiers
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/dev_stage="adult"
/clone_lib="full-length enriched swine cDNA library,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="taxon:9823"
/clone="TCH01B080037"
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Best Local Similarity:
Query Match:
DB:
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1182679 MARC
DN282586
DN282586.1 G
EST.
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Single pass sequencing. Bases called with phred v0.020425.c and
trimmed with the aid of the trim_alt option. Vector identified w
cross_match v0.990329.
Plate: RLK8015 row: B column: 19
Seq primer: TAGAAGGCACAGTCGAGG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Smith TPL
USDA, ARS, US Meat Animal Research Center
PO Box 166, Clay Center, NE 68933-0166, US
Tel: 402 762 4366
Fax: 402 762 4390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 856)
Smith, T.P.L., Roberts, A.J., Echternkamp, S.E.,
Wray, J.E. and Keele, J.W.
A second set of bovine ESTs from pooled-tissue
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
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                              GlyTrpArgGlyValGlyProAlaSerArgAsnSerGlyLeuTyrAsnIleThrPheLys
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AsnIleThrIleSerGlnTyrAlaCysHisAspGlnValAlaValThrIleLeuTrpSer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="MAKC /BUV".
/note="Vector: pcDNA3.1; Site 1: EcoRI; Site 2: Not /noter Wector: pcDNA3.1; Site 1: EcoRI; Site 2: Not /ibrary made with RNA pooled from multiple tissues including ovary, hindbrain, uterus, and day-30 who
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                        embryos
                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:9913"
/tissue_type="pooled"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Bos taurus"
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                                  1 (bases 1 to 851)
Smith, T.P.L., Roberts, A.J., Echternkamp, S.E., Wray, J.E. and Keele, J.W.
A second set of bovine ESTs from pooled-tissue Unpublished (2003)
Contact: Smith TPL
USDA, ARS, US Meat Animal Research Center
PO Box 166, Clay Center, NE 68933-0166, USA
Tel: 402 762 4366
Fax: 402 762 4390
                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
                                                                                                                                              1184215 MARC 7BOV Bos taurus
DN283973
DN283973.1 GI:60452583
                                                                                                                    Bos taurus
                                                                                                                             Bos taurus (cow)
                                                                                          Pecora; Bovidae; Bovinae;
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                                                                                                                                                                                                                                                            AlaMetAlaIleThrValProLeuValValIleSerAlaPheAlaThrLeuPheThrVal
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Percent Similarity:
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Plate: RLK8015 row: B column: 19
Seq primer: GTANTACCACTCACTATAGGG.
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                                   PheArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLysProPhe 199
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GlyProPheLysArgLysThrCysLysGlnGlnGlnThrThrGlnThrThrSerCysLeu
                                                                                     TITGTAAAGATCGTCCCTTTTCCTTCCATTAAAAATGAAAGCAATTATCACCCTTTCTTC
                                                                                                                                                                                                                                                             PheLysArgThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyr
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/mol type="mRNA"
/db_xref="taxon:9913"
/tisue_type="pooled"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone lib="MARC 7BOV"
/note="Vector: pcDNA3.1; Site 1: EcoRI; Site 2: NotI;
/ibzary made with RNA pooled from multiple tIssues
including ovary, hindbrain, uterus, and day-30 whole
embryos."
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Okumura,N., Hamasima,N. and Awata,T.
PEDE (Pig EST Data Explorer): construction of a
derived from porcine full-length cDNA libraries
Nucleic Acids Res. 32 (1), D484-D488 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP154750 mRNA linear BP154750 full-length enriched swine cDNA library, scrofa cDNA clone OVRM10115H10 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                             Fax: +81-29-838-8627
Email: huenishi@affrc.go.jp
EST project with full-length enriched cDNA libraries carried out
Animal Genome Research Program (Japan) by National Institute of
Agrobiological Sciences and STAFF-Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Animal Genome Laboratory, Genome Research Department
National Institute of Agrobiological Sciences
2 Kenodai, Tsukuba, Ibaraki 305-8602, Japan
Tel: +81-29-838-8627
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Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;
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      (1-738)
                                                                                                                                                                                       /tissue_type="ovary"
/dev_stage="adult"
/clone_lib="full-length
                                                                                                                                                                                                                                        /mol_type="mRNA"
/db_xref="taxon:9823"
/clone="OVRM10115H10"
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Uenishi, H., Eguchi, T., Suzuki, K., Sawazaki, T., 7
Okumura, N., Hamasima, N. and Awata, T.
PEDE (Pig EST Data Explorer): construction of a
derived from porcine full-length cDNA libraries
Nucleic Acids Res. 32 (1), D484-D488 (2004)
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Animal Genome Laboratory, Genome Research Department
National Institute of Agrobiological Sciences
2 Ikenodai, Tsukuba, Ibaraki 305-8602, Japan
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                                                  Contact: Hirohide Uenishi
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Laurasiatheria; Cetartiodactyla;
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d swine cDNA library,
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697 220 637 200 577 180 517 160 457 140 . 397 120 337 100 277 80 217 60 157 40 97

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Query
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                                  181
                                                                                                                                                    452
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                                                                                                                                                                                                                                 392
                                                                                                                                                                                                                                                     121 GluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeuAsnSerSerPhe
                                                                                                                                                                                                                                                                                                            332
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EST project with full-length enriched cDNA libraries carried out
Animal Genome Research Program (Japan) by National Institute of
Agrobiological Sciences and STAFF-Institute
Single pass sequencing of clones derived from oligo-capped cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vector sequences were eliminated by RepeatMasker version 2002/07/13 and crossmatch version 0.990319 Low quality bases were trimmed based on the quality values.

Location/Qualifiers
                                ArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCysLysProPheTrp
                                                                                               ValLysValValProPheProSerIleLysAsnGluSerAsnTyrHisProPhePhePhe
                                                                                                                                                      AAAAGAGCTGGAATGGAATCTCAGCCTTTCCTGAATATGAAATTTGAAACAGATTACTTT
                                                                                                                                                                              LysArgThrGlyMetGluSerGlnProPheLeuAsnMetLysPheGluThrAspTyrPhe
                                                                                                                                                                                                                                 GAAGGAAGACAGTGCCAACAACTGATTCTGAAGGACCCGAAGCAGCTCAACAGTAGCTTC
                                                                                                                                                                                                                                                                                                              GGGGCCCTCGGCATCGAATTCCTAAGAGGATTTCGGGTAATACTGGAGGAGCTGAAGTCA
                                                                                                                                                                                                                                                                                                                                  GlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGluGluLeuLysSer
                                                                                                                                                                                                                                                                                                                                                                                         ATCACCATCAGTCAGTACGCCTGCCACGACCAAGTGGCAGTCACCATTCTCTGGTCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                 IleThrIleSerGlnTyrAlaCysHisAspGlnValAlaValThrIleLeuTrpSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAACTGCACCACTTACTTGAGTCCTGTGGGGAAGCATGTGATCGCCGACGCCCAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AspAsnCysThrThrTyrLeuAsnProValGlyLysHisValIleAlaAspAlaGlnAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGAGGGAGTGGGCCGGCCAGCAGAAACAGTGGGCTGCACAACATCACCTTCAGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerGlnLeuAlaValAlaAlaGlyGlySerGlyArgAlaTrpGlyValAspThrCysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetAlaProTrpLeuGlnLeuCysSerValPhePheThrValAsnAlaCysLeuAsnGly
AGAACCCGCACCTGTGACCTGCTATTACAGCCGGACAACCCGGCCTGTAAACCCCTTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           +81-29-838-8627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="ovary"
/dev_stage="adult"
/clone_lib="full-length enriched swine cDNA library, adult ovary"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
/clone="OVR010067A07"
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1095.00
96.8%
93.5%
27.7%
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117 GluLeuLysSerGluGlyArgGlnCysGlnGlnLeuIleLeuLysAspProLysGlnLeu 136

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REFERENCE
AUTHORS
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DEFINITION
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KEYWORDS
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                                                                                      US-10-616-788-2 (1-738) x BU221978 (1-692)
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Best Local Similarity:
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JOURNAL
PUBMED
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Phasianinae; Gallus.

1 (bases 1 to 692)

Boardman, P.E., Sanz-Ezquerro, J., Overton, I.M., Burt, D.W., Bosch, E.,

Boardman, P.E., Sanz-Ezquerro, W.R.A., Wilson, S.A. and Hubbard, S.J.

Fong, W.T., Tickle, C., Brown, W.R.A., Wilson, S.A. and Hubbard, S.J.

A Comprehensive Collection of Chicken cDNAs

Curr. Biol. 12 (22), 1965-1969 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PO Box 88, Manchester, Tel: 01612008930 Fax: 01612360409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Department of Biomolecular Sciences University of Manchester Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Simon Hubbard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gallus gallus (chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603105617F1
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                         LeuTrpSerProGlyAlaLeuGlyIleGluPheLeuLysGlyPheArgValIleLeuGlu 116
                                                                                                                                                                                                                                                                                                                       /clone lib="CSEQCHN04"
//clone lib="CSEQCHN04"
//note="Torgan: whole embryo; Vector: pBluescript II KS(+);
//note="Torgan: whole embryo; Vector: pBluescript II KS(+);
Site_I: ECORI, Site_2: Not1; This normalized library was
constructed from 1 million independent clones: cDNA
synthesis was initiated using an oligo(dT) primer, using
methylated C in the first strand synthesis reaction.
Following this first strand reaction, double-stranded cDNA
was blunted, ligated to NotI adapters, digested with
ECORI, size-selected, and cloned into the NotI and ECORI
compatible sites of a custom modified MCS of the
pBluescript (KS+) vector. The library was normalized in 2
rounds using conditions adapted from Soares et al., PNAS
(1994) 91: 9228-9232 and Bonaldo et al., Genome Research 6
(1996): 791, except that a significantly longer
reannealing hybridization was used."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Simon. Hubbard@umist.ac.uk.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="whole embryo"
/dev_stage="20-21"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/strain="White Leghorn, Hisex"
/db_xref="taxon:9031"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               clone="ChEST44a6"
                                                                                                                               8.91e-101
1084.00
95.2%
83.7%
27.5%
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Matches:
Conservative:
Mismatches:
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Gaps:
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clone ChEST44a6
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F44a6 5', mRNA
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BU909956
LOCUS
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AUTHORS
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ORGANISM
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             Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Martha Rebbert, Steven L. Klein, Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The L.M.A.G.B. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: NCI-CGAP clone distribution information
found through the L.M.A.G.B. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM14210 row: d column: 21
High quality sequence stop: 716.
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                                                                                                                                                                                        Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                    Xenopus laevis (African clawed frog)
Xenopus laevis
Eukaryota, Metazoa; Chordata, Craniata, Vertebrata, Euteleostomi,
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                BU909956
907 bp mRNA linear EST 17-0
AGENCOURT 10487146 NICHD XGC Emb1 Xenopus laevis cDNA clone
IMAGE:6635685 5', mRNA sequence.
                                                                                                                                                                                                                       NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
                                                                                                                                                                                                                                                                     Xenopodinae; Xenopus; Xenopus.
                                                                                                                                                                                                                                                                                                                                                                   BU909956.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAATAAGAGCTATTGCCATTACAGTCCCTTTAGTTGTCATTTCGGCATTTGCAACACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProIleArgAlaMetAlaIleThrValProLeuValValIleSerAlaPheAlaThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATACAACAAGAAAAAACAATGCACTATGCACTAAAAACCAGTACATTCTCCGTGGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AsnThrThrArgLysValMetHisTyrAlaLeuLysProValHisSerProTrpAlaGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTTGTATTCTTCAGAATGTAACTCCAGGGGATTATATCATCGAGCTGGTCGATGACACT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysHisGluGlyProPheLysArgLysThrCysLysGlnGluGlnThrThrGluThrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerPheAspHisAlaProHisAsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATTCTTTTCCGAACTCGGCCATGTGAATTATTGCTACAGCCAGAAAACCTCATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProPhePheArgThrArgAlaCysAspLeuLeuLeuGlnProAspAsnLeuAlaCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGATTACTTTGTCAAGATTGTGCCTTTTCCTTCCATTAAAAATGAAAGTAATTATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrAspTyrPheValLysValValProPheProSerIleLysAsnGluSerAsnTyrHis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTTTTGATCATGCTCCCCACAACTTTGGATTTAGATATTACTTTCTTCACTACAAACTG
                                                                                                                                                                                                                                                          (bases 1 to 907)
quality sequence stop: 716.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                     GI:24091870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               323
                                                                                                                                                                                                                         Anatomy
                                                                                                                                                                                                                          Project (CGAP),
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                                                                                                                            AsnPheGlyPheArgPhePheTyrLeuHisTyrLysLeuLysHisGluGlyProPheLys
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SerProGlyAspTyrIleIleGluLeuValAspAspThrAsnThrThrArgLysValMet
                                                                                                         AATTTCGGCTTTAAATCCTTATTCCGTCAACTACAAACTGAAGCACGAGGGCTCCTTTAAA
                                                                                                                                                                                                                AsnLeuAsnIleSerGlnHisGlySerAspMetGlnValSerPheAspHisAlaProHis
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/mol type="mRNA"
/db xref="taxon:8355"
/clome="IMAGE:6635685"
/tlssue_type="embryo (stage 10)"
/tlssue_type="embryo (stage 10)"
/lab host="DHIOB (phage-resistant)"
/clome_lib="NICHD XGC Embl"
/clome_lib="NICHD XGC Embl"
/note="Vector: pCNV-SPORT6; Site_1: NotI; Site_2: SalI;
Cloned unidirectionally. Primer: Oligo dT. Average insert
size_1.55 kb. Constructed by Life Technologies. Note: This
is_a Xenopus Gene_Collection (XGC) library."
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BX750910/c
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                                                                                                                                                              Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequencing primer: T7
This sequence is from a Xenopus Gene Collection (XGC) library
constructed by Aaron M. Zorn.
cDNA was oligo dT primed from Sug of poly A+ RNA from stages 10-13
gastrulae. EcoRI-NotI cut cDNA was then ligated into pCS107 with
EcoRI at the 5' end and NotI at the 3' end.
Vector: pCS107; Site 1: EcoRI; Site 2: NotI
Host: Escherichia coli XL1- blue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus; Silurana.

1 (bases 1 to 886)
Croning,M.D.R., Ashurst,J.L., Taylor,R., Zorn,A.M. and Rogers,J. Sanger Xenopus tropicalis EST project 2001 (11_2003)
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: trop@sanger.ac.uk
Sanger Xenopus tropicalis EST project 2001
TROPICALIS_SEQUENCE_ID: TGas082k14.q1kT7
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BX750910 XGC-gastrula Xenopus
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 AspGluGluSerSerGluSerSerThrTyrThrAlaAlaLeuProArgGluArgLeuArg
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                                                                                                                                                                                                                                                                     /dev stage="gastrula (stages 10.5-12 mixed)"
/lab_host="Escherichia coli XL1-blue"
/clone lib="XGC-gastrula"
/note="Vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDNA
was oligo dT primed from Sug of poly A+ RNA from stages
10-13 gastrulae. EcoRI-NotI cut cDNA was then ligated
into pCS107 with EcoRI at the 5' end and NotI at the 3'
end."
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/mol_type="mRNA"
/db_xref="taxon:8364"
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Hominidae; Homo.

1 (bases 1 to 583)
Suzuki,Y., Yamashita,R., Shirota,M., Sakakibara,Y., Chiba,J., Mizushima-Sugano,J., Nakai,K. and Sugano,S.
Sequence comparison of human and mouse genes reveals a homolo block structure in the promoter regions
                                                                                                                                                           BP275741 Sugano cDNA library,

KDN04362, mRNA sequence.

BP275741

BP275741.1 GI:52189473

EST.
                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                               Homo sapiens
                                                                                                                                          Homo sapiens (human)
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Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Jap
Email: ysuzuki@ims_u-tokyo.ac.jp.
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15342556
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                                                                                             CTGATGGAAGGACTCTCGACGGACCAGACAGAAACGTTTTCC
                                                                                                                                                   ATGCCGCGGGACTCAGGCATCTATGACTCGTCTGTGCCCTCATNCGAGCTGTCTCTGCCA
                                                                                                                                                                 MetProArgAspSerGlyIleTyrAspSerSerValProSerSerGluLeuSerLeuPro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="KDN04362"
/tissue_type="kidney"
/clone_Tib="Sugano cDNA library, kidney"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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Fong, W.T., Tickle, C., Brown, W.R.A., Wilson, S.A.
A Comprehensive Collection of Chicken cDNAs
Curr. Biol. 12 (22), 1965-1969 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Phasianinae; Gallus.
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Fax: 01612360409
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Department of Biomolecular Sciences University of Manchester Institute
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Contact: Simon Hubbard
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                                 GlnGluAsnIleTyrSerHisLeuAspGluGluSerSerGluSerSerThrTyrThrAla
                                                                                                                                                                            GGGGATTATATCATCGAGCTGGTCGATGACACTAATACAACAAGAAAAACAATGCACTAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         /notes vector: pBluescript II KS(+); Site_1: EcoRI;
Site_2: Not1; This normalized library was constructed from
1 million independent clones. cDNA synthesis was initiated
using an oligo(dr) primer, using methylated C in the first
strand synthesis reaction. Following this first strand
reaction, double-stranded cDNA was blunted, ligated to
NotI adapters, digested with EcoRI size-selected, and
cloned into the NotI and EcoRI compatible sites of a
custom modified MCS of the pBluescript (KS+) vector. The
library was normalized in 2 rounds using conditions
adapted from Soares et al., PNAS (1994) 91: 9228-9232 and
Bonaldo et al., Genome Research 6 (1996): 791, except that
a significantly longer reannealing hybridization was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cartilage"
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/lab_host="DH10B"
/clone_lib="CSEQRBN22"
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/db_xref="taxon:9031"
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REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
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ORGANISM
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CV126214
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                                                                                                                                 Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Howard Jacobs
CDNA Library Preparation: Express Genomics
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM15711 row: p column: 15
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                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi, Muroidea; Muridae; Murinae; Rattus.

1 (bases 1 to 748)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
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Location/Qualifiers
                /organism="Rattus norvegicus"
/mol type="mRAN"
/db xref="taxon:10116"
/clone="IMAGE:7453313"
/tissue_type="testis, pooled"
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                GACTETTACTCATACCTGGANGATCAGCATGCAGGCCTGGACCAGACACTGANGCCAGCC
                                         LysSerGlyArgSerLeuTyrValAlaIleCysAsnMetHisGlnPheIleAspGluGlu
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                                                                                      ProGluSerAspPheCysLeuLysValGluAlaProValLeuGlyAlaThrGlyProAla
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/clone llb="NIH MGC 238"
/note="Organ: testis; Vector: pExpress-1; Site_1: EcoRV;
/note="Organ: testis; Vector: pExpress-1; Site_1: EcoRV;
Site_2: NotI; RNA obtained from testis tissue of 8 wk old
animal. Tissues were snap-frozen and kept at -80C before
RNA extraction and purification (Tri-reagent method). cDNA
was primed using oligo-dT primer:
5'-pGACTAGTTCTAGATCGCGAGCGGCCCC(T)25-3' and cloned into
the EcoRV/NotI sites of pExpress-1. Size-selection >1.4kb
resulted in an average insert size of 1.9 kb. This primary
library is normalized (non-normalized primary library is
NIH MGC 237) and was constructed by Express Genomics
(Frederick, MD)"
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Db 717 CGCTGTGATGGTGGCCTGCNTGCAGCCCTG 746
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2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
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5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
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Sequence 2, Appli	Sequence 2, Appli	Sequence 9, Appli	Sequence 1, Appli	Sequence 4, Appli	Sequence 10, Appl	Sequence 10, Appl	Sequence 107, App	Sequence 1, Appli	Sequence 9, Appli	Sequence 3, Appli	Sequence 3, Appli	Sequence 3, Appli	Sequence 19, Appl	Sequence 16, Appl	Sequence 4, Appli	Sequence 16, Appl	Sequence 12, Appl

## ALIGNMENTS

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301 MAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRPKVFL 360	301 MAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRPKVFL 360	241 PFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIRA 300	241 PFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIRA 300	181 RTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEG 240	181 RTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEG 240	121 EGRQCQQLILKDPKQLNSSPKRTGMESQPPLNMKFETDYFVKVVPPPSIKNESNYHPFFF 180	121 EGRQCQQLILKDPKQLNSSFKRTGMESQPFLNMKFETDYFVKVVPFPPSIKNESNYHPFFF 180	61 DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKS 120	61 DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKS 120	1 MAPWIQICSVFFTVNACINGSQLAVAAGGSGRAWGVDTCGWRGVGPASRNSGLYNITFKY 60	1 MAPWIQICSVPFTVNACINGSQLAVAAGGSGRAWGVDTCGWRGVGPASRNSGLYNITFKY 60	Local Similarity 100.0%; Pred. No. 0; 1e8 738; Conservative 0; Mismatches 0; Indels 0; Gaps 0	Match 100.0%; Score 3948	OKGANISM: Homo Bapiens	: 0	739	OF SEQ ID NO	DR FILING DATE: 2000-03-16	FILING DATE: 2000-11-28	RENT FILING DATE: 2001-03-15  OR APPLICATION NUMBER: 09/724,460	ENT APPLICATION NU	REFER	ANT: Jing, Shuqian	o. US20020045213	567-	1
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APPLICANT: Jing, Shuqian
FILE OF INVENTION: IL-17 Receptor Like Molecules and Uses Thereof
FILE REFERENCE: 01017/36916A
CURRENT APPLICATION NUMBER: US/10/216,156
CURRENT EILING DATE: 2002-08-08
PRIOR APPLICATION NUMBER: US/9/809,567
PRIOR FILING DATE: 2001-03-15
PRIOR FILING DATE: 2001-03-15
PRIOR APPLICATION NUMBER: 09/724,460
PRIOR APPLICATION NUMBER: 60/189,816
PRIOR APPLICATION NUMBER: 60/189,816
PRIOR APPLICATION NUMBER: 60/189,816
PRIOR FILING DATE: 2000-01-28
PRIOR FILING DATE: 2000-03-16
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 738
TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                                                                   / Match 100.0%; Score 3948; Local Similarity 100.0%; Pred. No. 0; ee 738; Conservative 0; Mismatches
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APPLICANT: Jing, Shuqian
FILE REFERENCE: 01017/39525
CURRENT APPLICATION NUMBER: US/10/616,788
CURRENT FILING DATE: 2003-07-10
PRIOR APPLICATION NUMBER: 09/809,567
PRIOR FILING DATE: 2001-03-15
PRIOR FILING DATE: 2001-03-15
PRIOR PILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 09/724,460
PRIOR FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: 60/189,816
PRIOR APPLICATION NUMBER: 60/189,816
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-03-16
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PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/189,816
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US-10-616-788-2
; Sequence 2, Application US/10616788
; Publication No. US20040048338A1
; GENERAL INFORMATION:
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                                                                                             DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKS
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Sequence 4, Application US/10842006
Publication No. US20040235104A1
GENERAL INFORMATION:
APPLICANT: Yang, Ruey-Bing
TITLE OF INVENTION: A Novel Human SEF Molecule and Uses
TITLE OF INVENTION: Therefor
FILE REFERENCE: MPI03-071P1RM
CURRENT APPLICATION NUMBER: US/10/842,006
CURRENT FILING DATE: 2004-05-07
PRIOR APPLICATION NUMBER: 60/469522
PRIOR APPLICATION NUMBER: 60/469522
PRIOR FILING DATE: 2003-05-08
NUMBER OF SEQ ID NOS: 12
SOPTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 4
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                                                                                                                  US-10-842-006-4
                                                       Query Match
Best Local Similarity
Matches 738; Conserv
                                                                                                                            TYPE: PRT
ORGANISM: Homo Sapiens
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Sequence 8, Application US/09912157 Patent No. US20020165348A1 GENERAL INFORMATION:
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                                                                                                          KADLGCRSYTDELHAVAP 738
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APPLICANT: Presnell, Scott R.
APPLICANT: Kuestner, Rolf E.
APPLICANT: Goo, Zeren
TITLE OF INVENTION: Human Cytokine Receptor
FILE REFERENCE: 00-49
CURRENT APPLICATION NUMBER: US/09/912,157
CURRENT FILING DATE: 2001-07-23
NUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 8
LENGTH: 739
                                                                          ; TYPE: PRT
; ORGANISM: Homo
US-09-912-157-8
Query Match
Best Local Similarity
Matches 734; Conserv
                   99.2%;
Pred. No. 0;
1; Mismatches
                                       DB
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Conservative

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Length 739;

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Gaps

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Sequence 8, Application US/10717282
Publication No. US20040077052A1
GENERAL INFORMATION:
APPLICANT: Presnell, Scott R.
APPLICANT: Kuestner, Rolf E.
APPLICANT: Kuestner, Rolf E.
APPLICANT: Kuestner, Rolf E.
CURRENT: FILLE OF INVENTION: Human Cytokine Receptor
FILE REFERENCE: 00-49
CURRENT APPLICATION NUMBER: US/10/717,282
CURRENT FILING DATE: 2003-11-19
FRIOR APPLICATION NUMBER: US/99/912,157
PRIOR FILING DATE: 2001-07-24
NUMBER OF SEQ ID NOS: 13
SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 8
LENGTH: 739
TYPE: PRT
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US-10-717-282-8
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Sequence 2, Application US/10842006
Publication No. US20040235104A1
GENERAL INFORMATION:
TITLE OF INVENTION: A Novel Human SEF Molecu
TITLE OF INVENTION: Therefor
FILE REFERENCE: MPIC3-071P1RM
CURRENT FILING DATE: 2004-05-07
PRIOR APPLICATION NUMBER: US/10/842,006
CURRENT FILING DATE: 2003-05-08
PRIOR FILING DATE: 2003-05-08
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US-10-842-006-2
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; ORGANISM: Homo sapiens US-10-717-282-8
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Best Local Similarity 99.5
Matches 734; Conservative
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                    KADLGCRSYTDELHAVAP 738
                                                                                      DSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSC
                                                                                                                                      FCLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPR
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Pred. No. 0;
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RESULT 8
US-10-608-449-2
; Sequence 2, Application US/10608449
; Publication No. US2004026834A1
; GENERAL IMPORMATION:
; APPLICANT: Tsinghua University
; TITLE OF INVENTION: Human Interleukin-17
; FILE REFERENCE: I2003269C-US
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; ORGANISM: Homo
US-10-842-006-2
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Best Local Similarity
Matches 732; Conserv
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CYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIV
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US-09-912-157-2
; Sequence 2, App
; Patent No. US20
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CURRENT APPLICATION NUMBER: US/10/608,449
CURRENT FILING DATE: 2003-06-30
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn version 3.1
SEQ ID NO 2
LENGTH: 739
TYPE: PAT
ORGANISM: Homo sapiens
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                                                  DSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSC
                                                                            FCLKVEAAVLGATGFADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPR
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                                      DSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSC
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Sequence 2, Application US/09912157 Patent No. US20020163348A1 GENERAL INFORMATION: APPLICANT: Presnell, Scott R.

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; APPLICANT: Kuestner, KOLL ...
; APPLICANT: Gao, Zeren
; TITLE OF INVENTION: Human Cytokine Receptor
; FILE REFERENCE: 00-49
; CURRENT FILLING DATE: 2001-07-23
; CURRENT FILLING DATE: 2001-07-23
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 2
; SEQ ID NO 2
; LENGTH: 753
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-09-912-157-2

98.8%; Score 3901;
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                                             PPALPSKLLSSGSCKADLGCRSYTDELHAVAP
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                                                                   PPALPSKLLSSGSCKADLGCRSYTDELHAVAP 738
                                                                                            LHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEE
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Sequence 2, Application US/10717282
Publication No. US20040077052A1
GENERAL INFORMATION:
APPLICANT: Presnell, Scott R.
APPLICANT: Kuestner, Rolf E.
APPLICANT: Gao, Zeren
TITLE OF INVENTION: Human Cytokine Receptor
FILE REFERENCE: 00-49
CURRENT FILING DATE: 2003-11-19
CURRENT FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US/10/717,282
CURRENT FILING DATE: 2001-07-24
NUMBER OF SEQ ID NOS: 13
SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 753
TYPE: DET
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; ORGANISM: Homo
US-10-717-282-2
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CURRENT FILING DATE: 2001-07-23
NUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 5
LENGTH: 753
TYPE: PRT
ORGANISM: Homo sapiens
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Patent No. US20020165348A1
GENERAL INFORMATION:
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APPLICANT: Kuestner, Rolf E.
APPLICANT: Gao, Zeren
TITLE OP INVENTION: Human Cytokine Receptor
FILE REPERENCE: 00-49
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-717-282-5
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APPLICANT: Kuestner, Rolf E.
APPLICANT: Gao, Zeren
TITLE OF INVENTION: Human Cytokine Receptor
FILE REFERENCE: 00-49
CURRENT APPLICATION NUMBER: US/10/717,282
CURRENT FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US/09/912,157
PRIOR APPLICATION NUMBER: US/09/912,157
PRIOR FILING DATE: 2001-07-24
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SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 5
LENGTH: 753
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QGSRRNYFRSKSGRSLYVAICNMHQFIDEEPDWFEKQFVPFHPPPLRYREPVLEKFDSGL
                                                                               SSSAALSKFIAVYFDYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTR
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TITLE OF INVENTION: MAMMALIAN RECEPTOR PROTEINS; RELATED REAGENTS AND METHODS
FILE REPERBYCE: DX01170K

CURRENT APPLICATION NUMBER: US/09/863,818A

CURRENT FILING DATE: 2001-05-23

PRIOR APPLICATION NUMBER: US 60/206,862

PRIOR FILING DATE: 2000-05-24

NUMBER OF SEQ ID NOS: 22

SOFTWARE: Patentin version 3.1

SEQ ID NO 10

LENGTH: 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 10, Application US/09863818A Publication No. US20030092881A1 GENERAL INFORMATION:
  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                  LOCATION: (18)...(18)
OTHER INFORMATION: The 'Xaa' a NAME/KEY: misc_feature LOCATION: (26)...(26)
OTHER INFORMATION: The 'Xaa' a NAME/KEY: misc_feature LOCATION: (109)...(109)
OTHER INFORMATION: The 'Xaa' a NAME/KEY: misc_feature LOCATION: (120)...(120)
                                                NAME/KBY: misc_feature
LOCATION: (519)..(519)
OTHER INFORMATION: unki
                                                                                                                                                                OTHER INFORMATION: unknown NAME/KEY: misc_feature LOCATION: (194)...(194) OTHER INFORMATION: unknown
                                                                                                                                                                                                                                                                            NAME/KEY: misc feature LOCATION: (8)..(8) OTHER INFORMATION: unknown
                                                                                        OTHER INFORMATION: unknown
                                                                                                    NAME/KEY: misc_feature
LOCATION: (475)..(475)
                                                                                                                            NAME/KEY: misc feature LOCATION: (442)..(442) OTHER INFORMATION: unknown
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LOCATION: (144)..(144)
OTHER INFORMATION: unknown
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                                                                    US-10-749-144-10
Sequence 10, Application US/10749144
Publication No. US20040197306A1
GENERAL INFORMATION:
APPLICANT: GOTMAN, Daniel M.
TITLE OF INVENTION: MAMMALIAN RECEPTOR PROTEINS; RELATED REAGENTS AND METHODS
FILE REFERENCE: DX01170K1
CURRENT APPLICATION NUMBER: US/10/749,144
CURRENT FILING DATE: 2003-12-29
PRIOR APPLICATION NUMBER: US 60/206,862
PRIOR PILING DATE: 2000-05-24
PRIOR FILING DATE: 2000-05-24
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                          NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn version 3.2
SEQ ID NO 10
LENGTH: 738
LENGTH: 738
TYPE: PRT
ORGANISM: Homo sapiens
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Best Local Similarity
Matches 722; Conserv
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NAME/KEY: misc_feature
LOCATION: (18)...(18)
OTHER INFORMATION: The 'Xaa'
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                                                                      FCLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPR
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                                                                                                                                                                                DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQGSRRNYFRSKSGR
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DSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSC
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US-10-924-667-10
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SEQ ID NO 10
LENGTH: 738
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ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
LOCATION: (18)...(18)
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NAME/KEY: misc feature
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LOCATION: (442)..(442)
OTHER INFORMATION: unknown
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NAME/KEY: misc_feature
LOCATION: (194)...(194)
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NAME/KEY: misc feature
LOCATION: (170)...(170)
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OTHER INFORMATION: unknown
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NAME/KEY: misc_feature
LOCATION: (8)..(8)
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Sequence 10, Application US/10924667
Publication No. US20050009145A1
GENERAL INFORMATION:
APPLICANT: Gorman, Daniel M.
TITLE OF INVENTION: MAMMALIAN RECEPTOR PROTEINS; RELATED REAGENTS AND TITLE OF INVENTION: METHODS
FILE REFERENCE: DX01170K
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CURRENT FILING DATE: 2004-08-23
PRIOR APPLICATION NUMBER: US/09/863,818
PRIOR FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/206,862
PRIOR APPLICATION NUMBER: US 60/206,862
PRIOR FILING DATE: 2000-05-24
NUMBER OF SEQ ID NOS: 22
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OTHER INFORMATION: unknown amino
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NAME/KEY: misc_feature
LOCATION: (519)...(519)
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KADLGCRSYTDELHAVAP 738
                                                       CYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIV
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Search completed: March Job time : 169 secs

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Result
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Listing first 45 summaries
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Copyright (c) 1993 - 2006 Biocceleration Ltd.
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US-11-181-330-8
US-11-181-424-60
US-11-115-639-3
US-11-115-533-10
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Sequence 438, App
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                                                                                                                                   85, Appl
253, App
2951, Ap
                                                        1, Appli
23, Appl
2, Appli
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10, Appl
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87.5	88.5	88.5	89	89	89	89.5	89.5	90	90	90.5	90.5	90.5	90.5	90.5	90.5	90.5	91	91	16
2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
867	8746	871	979	625	625	1346	509	987	987	2641	2353	2314	1055	1055	1055	901	5405	2811	2326
σ	7	σ	σ	σ	σ	7	7	7	Q	σ	7	7	7	7	7	7	7	σ	7
US-10-131-826A-20	US-11-098-686-10232	US-10-933-025-3	US-10-636-320-6	US-10-973-115B-70	US-10-131-826A-70	US-11-060-005-2	US-11-072-512-2072	US-11-203-251A-87	US-10-770-726-61	US-10-877-346-63	US-11-097-728-6	US-11-097-728-2	US-11-203-251A-86	US-11-072-175-139	US-11-169-041-155	US-11-072-512-2920	US-11-108-172-1116	US-10-877-346-27	US-11-126-313-37
Seguence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	sequence
20, Appl	10232, A	<ol><li>Appli</li></ol>	6, Appli	70, Appl	70, Appl	<ol><li>Appli</li></ol>	2072, Ap	87, Appl	61, Appl	63, Appl	6, Appli	2, Appli	86, Appl	•	155, App	2920, Ap	1116, Ap	27, Appl	3/, Appi

## ALIGNMENTS

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PRIOR APPLICATION NUMBER: JP 2001-379298
PRIOR FILING DATE: 2001-11-05
NUMBER OF SEQ ID NOS: 4096
SOPTWARE: Patentin Ver. 2.1
SEQ ID NO 3399
LENGTH: 728
TYPE: PRT
ORGANISM: Homo sapiens
US-11-072-512-3399
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/11/072,512
CURRENT FILING DATE: 2005-03-07
PRIOR APPLICATION NUMBER: US 60/350,978
PRIOR FILING DATE: 2002-01-25
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: SEKI, NAOHIKO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: OTSUKA, WOTOYUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
IITLE OF INVENTION: Novel full length cDNA
FILE REFERENCE: 08435-0191
101 GALGIEFLKGFRVILEELKSEGRQCQQLILKDPKQLNSSFKRTGMESQPFLNMKFETDYF 160
                                   30 WQGVGPASRNSGLYNITEKYDNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSP
                                                    41 WRGVGPASRNSGLYNITFKYDNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSP 100
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NAGAI, KEIICHI
IRIE, RYOTARO
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YAMAMOTO, JUN-ICHI
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SATO, HIROYUKI
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OTSUKI, TETSUJI
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Pred. No. 0;
2; Mismatches
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Sequence

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APPLICANT: COMMINGER: US GO/099,116

APPLICANT: Duclert, Aymeric

APPLICANT: Jobert, Severin

APPLICANT: Clusel, Catherine

FILE REFERENCE: 56.US4.CIP

CURRENT APPLICATION NUMBER: US/09/978,360A

CURRENT FILING DATE: 2001-10-15

PRIOR APPLICATION NUMBER: US 60/066,677

PRIOR APPLICATION NUMBER: US 60/069,957

PRIOR APPLICATION NUMBER: US 60/069,957

PRIOR APPLICATION NUMBER: US 60/074,121

PRIOR APPLICATION NUMBER: US 60/074,121

PRIOR APPLICATION NUMBER: US 60/091,563

PRIOR APPLICATION NUMBER: US 60/091,563

PRIOR APPLICATION NUMBER: US 60/092,116

PRIOR APPLICATION NUMBER: US 60/095,116

PRIOR APPLICATION NUMBER: US 60/095,136

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US-09-978-360A-438
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; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: SIGNAL
; LOCATION: -184..-1
US-09-978-360A-438
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
TITILE OF INVENTION: SECRETED AND TRANSMEMBRANE POI
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P323ORLC1
CURRENT APPLICATION NUMBER: US/10/063,703
CURRENT FILING DATE: 2002-05-08
PRIOT APPLICATION Temoved - See Palm or File
NUMBER OF SEQ ID NOS: 170
SEQ ID NO 158
LENGTH: 502
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PRIOR APPLICATION NUMBER: PCT/IB98/02122
PRIOR PILING DATE: 1998-12-17
PRIOR PILING DATE: 1998-12-17
PRIOR FILING DATE: 1999-02-09
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 810
SOFTWARE: Patent.pm
SEQ ID NO 438
LENGTH: 385
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Eaton, Dan L.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      204 NLNISQHGSDMQVSF-----DHAPHNFGFRFFYLHYKLKHEGPFKRKTC------
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYTAAL-----PREKLR-----PREKUKLCYSSKDGQNHMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----KQEQTTE---TTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIR 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCGKSEGSPSENSQ-DLFPLAFNLFCSDLR----SQIHLHKYVVVYFREIDTKDDYNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DLSTKYRLMDNLPQLCSHL
                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E. Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                           Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/10063703 o. US20060008901A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.4%; Score 134.5; DB 5;
20.1%; Pred. No. 0.00024;
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                                                                                             See Palm or File Wrapper
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; ORGANISM: Homo Sapien
US-10-063-703-158
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                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 170
SEQ ID NO 158
LENGTH: 502
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                    ORGANISM: Homo Sapien
-11-102-240-158
                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/170262 PRIOR FILING DATE: 199-12-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: ANTIBODIES TO POLYPEPTIDES ENCODED BY A NUCLEIC ACID UNDEREXPRESS
TITLE OF INVENTION: ESOPHAGEAL TUMOR
FILE REFERENCE: P3230R1C106C
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 10/063662
PRIOR FILING DATE: 2002-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICANT: Goddard, Audrey
                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match 3.4%;
Local Similarity 20.1%;
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US00/23328 FILING DATE: 2000-08-24
                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 10/006867 FILING DATE: 2001-12-06
204 NINISQHGSDMQVSF-----DHAPHNFGFRFFYLHYKIKHEGFFKRKTC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         461 SVCPKYHLMKDATAFCAEL 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              407 TCGKSEGSPSENSQ-DLFPLAFNLFCSDLR---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433 KNYKHKGGGRGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIAVYFDYSCEGDVPGIL 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373 VVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIVVCSKGMKYFVDK 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          342 TYTAAL-----PREKLR-----PREKLR-----PREKVFLCYSSKOGQNHMN 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300 AMAITVPLVVISAFATL----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         184 ITACKKNEETVEVNFTTTPL-----GNRYMALIQHSTI-----IGFSQVFEPHQKKQT 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143 NANMNEDGPSMSVNFTSPGCLDH-----IMKYK-----KKĆVKAGSLWDPN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     204 NLNISQHGSDMQVSF-----DHAPHNFGFRFFYLHYKLKHEGPFKRKTC------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/11/102,240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    76;
                                                                  76; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISTKYRLMDNLPQLCSHL 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TICYFTEFLONHCRSEVILEKWOKKKIAEMGPVOWLATOKKAADKVVFLLSNDVNSVCDG 406
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----KQEQTTE---TTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gurney, Austin L. Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Godowski, Paul J.
Grimaldi, Christopher J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/11102240 b. US20050260647A1
                                                              3.4%; Score 134.5; DB 7; llarity 20.1%; Pred. No. 0.00036; Conservative 49; Mismatches 141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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Pred. No. 0.00036;
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                                                                Indels 113;
                                                                                                      Length 502;
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FRIOR APPLICATION NUMBER: US 60/462,047
FRIOR FILING DATE: 2003-04-07
NUMBER OF SEQ ID NOS: 1704
SOFTWARE: Pt SEQ_Genes Version 1.0
SEQ ID NO 1015
LENGTH: 730
TYPE: PRT
ORGANISM: Homo sapiens
US-10-821-234-1019
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 2.8%; Score 112.5; DB Best Local Similarity 19.7%; Pred. No. 0.066;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1019, Application US/10821234
Publication No. US20050255114A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/821,234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 821A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Labat, Ivan APPLICANT: Stache-Cra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TLE OF INVENTION: Methods for Diagnosis
                                                                                                                                                                                                              236 L----KHEGPFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVH
                                                                                                                                                                                                                                                        138 PLQSPTTKVKLECNPTARIYRKHFLGKEHFN-----YYSLDTA---LGHLVFSLKYD 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               347
                                          349 RERLRPRPKVFLCYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWE-----DFSLCR--
                                                                                                                              292 SPWAGPIRAMAITVPLVVIS---AFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALP
                                                                                                                                                                        187 VIGDQEHLRLLLRTKCRTYHDVIPISCLTEFPNVVQMAKLVCEDVNVDR-----FYPVL
                                                                                                                                                                                                                                                                                                   193 -----NLACKP-----FWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYK
                                                                                                                                                                                                                                                                                                                                                                                     153 MKFETDYFVKVVPFPSIKNESNYHPFFFRTRACDLLLQPD------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  433 KNYKHKGGGRGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIAVYFDYSCEGDVPGIL 492
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     232 RASVVIPVTGDSEGATVQLTPYFPTCGSDCIRHKGTVVLC---PQTGVPPPLDNNKSKPG 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300 AMAITVPLVVISAFATL-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            143 NANMNEDGPSMSVNFTSPGCLDH----
                                                                                                                                                                                                                                                                                                                                             88 LKTEEDY----IPYPSV-----HEVLGREGPFPLILLPQFGGYWIEGTNHEITSIPETE
                                                                                    YPKAS----RLIVTFDEHVISNNFKFGVIYQKLGQTSEEB-----LFSTNEBSPAFVEFLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DLSTKYRLMDNLPQLCSHL 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCGKSEGSPSENSQ-DLFPLAFNLFCSDLR---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stache-Crain, Birgit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----PRERLR-----PRPKVFLCYSSKDGQNHMN 372
                                                                                                                                                                                                                                                                                                                                                                                                                           80;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -SQIHLHKYVVVYFREIDTKDDYNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                               261;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 730;
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Sequence 1. Application US/10510524

Publication No. US20050260209A1

GENERAL INFORMATION:
APPLICANT: BOYD, ROBERT S
APPLICANT: PLETCHER, GRAHAM C
APPLICANT: HUDSON, LYNDSEY J
APPLICANT: PATEL, SONAL
APPLICANT: TERRETT, JONATHAN A
ITILE OF INVENTION: AN EPHRIN-B RECEPTOR PROTEIN INVOLVED IN CARCINOMA
FILLE REFERENCE: 2543-1-037PCT/US
CURRENT APPLICATION NUMBER: US/10/510,524

CURRENT APPLICATION NUMBER: GB0208089.3

PRIOR APPLICATION NUMBER: GB0208089.3

PRIOR APPLICATION NUMBER: GB0208089.3

PRIOR APPLICATION NUMBER: GB0208089.3

PRIOR FILING DATE: 2002-04-09

NUMBER OF SEQ ID NOS: 9

SOFTWARE: PATENTAL SECUENCE SEC
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US-10-510-524-1
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                              309 RTTSPAASICTCHNNFYRADSDSADSACTTVPSP-PRGVISNV-----NETSLI 356
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                                                           150 FLNMKFETDYFVKVVPFPSIKNESNYHPFFFRTRACDLLLQPDNLACKPFWKPRNLNISQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          689 TSS-----LGEEEPPALPSKL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           328 NKEIMFHVSTKLPYTEGDAQQLQRKRHIGNDIVAV-----VFQDENTPFVPDMIASNFL
                                                                                                                                                                                96 ILWS-PGALGIEFLKGFRVILEELKSEG-----RQCQQLILKDPKQLNSSFKRTGMESQP 149
                                                                                                                                                                                                                                                                                                       42 RGVGPASRNSGLYNITFKYDN-----CTTYLNPVGKHVIADAQNITISQYACHDQVAVT
                                                                                                                          LEWSEPRDLGVRDDLLYNVICKKCHGAGGASACSRCDDNVEFVPROLGLSEPRVHTS---
--HLLAHTRYTFEVQAVNGVSGKSPLPPRYAAVNITTNQAAPSEV-----PTLRLHSS
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                                                                                                                                                                                                                                                                                                                                                                2.6%; Score 103.5; Dilarity 18.8%; Pred. No. 0.71; Conservative 119; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                           DB 6; Length 998;
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; TYPE: PRT ; ORGANISM: Homo sapiens US-11-181-330-8
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US-11-181-330-8
                                                                                                                                                                                       APPLICATION NEUROPROTECTIVE THERAPEUTICS AND ASSAYS FOR IDENTIFYING TITLE OF INVENTION: NEUROPROTECTIVE THERAPEUTICS AND ASSAYS FOR IDENTIFYING TITLE OF INVENTION: THE SAME
FILE REFERENCE: CMA-3.25
CURRENT APPLICATION NUMBER: US/11/181,330
CURRENT FILING DATE: 2005-07-14
PRIOR APPLICATION NUMBER: PCT/US04/01209
PRIOR APPLICATION NUMBER: PCT/US04/01209
PRIOR APPLICATION NUMBER: 60/440,679
PRIOR APPLICATION NUMBER: 60/440,679
PRIOR APPLICATION NUMBER: 60/440,679
PRIOR FILING DATE: 2003-01-17
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PATENTIN VET. 3.2
SEQ ID NO 8
LENGTH: 1273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 8, Application US/11181330 Publication No. US20060035283A1 GENERAL INFORMATION:
Query Match 2.5%; Score 99.5; DB 7; Best Local Similarity 18.5%; Pred. No. 2.4; Matches 143; Conservative 92; Mismatches 214;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          843
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KVIASAQSGMSQPLLDRTVPDYTTFTTVGDWLDAIK-MGRYK-----ESFVSAGFASFDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---SVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSCKADL 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KIPIRWTAPEAIAYRKFTSASDVWSYGIVMWEVMS------YGERPYWDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GMKYLSEMNYVHRDLAARNILVNSNLVCKVSDFGLSRFLEDDPS-----DPTYTSSLGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PGILDLS---TKYR-----LMDNLPQLCSHLHSRDHGLQEPGQHT------
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---FTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRPKVFLCYSSKDGQNHMVV 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YVVQV-----RARTVAGYGQYSRPAEFETTSERGSGAQQLQEQLPLIVGSATAGLVFVVA 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNQDVINAVEQDYRLPPPMDCPTALHQLMLDCWVRDRNLRPKFSQIVNTLDKLIRNAASL 902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PNIIRLEGVVTKSRPVMILTEFMENC-ALDSFLRLND------GQFTVIQLVGMLRGIAA 744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----GRIKQPGRREVF-VAIKTIKVGYTERQRRDFLSEASIMGQF-----DH 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KNYKHKGGGRGSGKGELFLVAVSAI----AEKLRQAKQSSSAALSKFIAVYFDYSCEGDV 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----GSDSEYTEKL-QQYIAPGMKVYIDPFTYEDPN--EA 620
                                                        Length 1273;
     Indels 323;
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FILE REFERENCE: AE702US
CURRENT APPLICATION NUMBER: US/11/203,251A
CURRENT FILING DATE: 2005-08-15
PRIOR APPLICATION NUMBER: 60/601,634
PRIOR APPLICATION NUMBER: 60/601,634
PRIOR APPLICATION NUMBER: 60/608,852
PRIOR PILING DATE: 2004-09-13
NUMBER OF SEO ID NOS: 101
SOPTWARE: PATENTIN VERSION 3.3
SEO ID NO 88
LENGTH: 998
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US-11-203-251A-88
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                                                                                                                                                                                                                                                                                                   Sequence 88, Application US/11203251A Publication No. US20060039904A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                            TITLE OF INVENTION: EPH RECEPTOR FC VARIANTS WITH ENHANCED ANTIBODY DEPENDENT TITLE OF INVENTION: CELL-MEDIATED CYTOTOXICITY ACTIVITY
                                                                                                                                                                                                                                                                                    APPLICANT: MedImmune Inc.
  TYPE: PRT
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                                                                                                                                           US-10-330-773-904
                                                                              Sequence 904, Application US/10330773
Publication No. US20060040262A1
GENERAL INFORMATION:
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APPLICANT: David W. Morris
APPLICANT: Marc Malandro
TITLE OF INVENTION: Novel Compositions and Methods
FILE REFERENCE: 529452001300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      574 VVVIAIVCLRKQRH------GSDSEYTEKL-QQYIAPGMKVYIDPFTYEDPN--EA 620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          210 HGSDMQVSFDHAPHNFGFRFFYLHYKLKHEGPF-KRKTCKQEQTTETTSCLLQNVSP-GD
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                                                                                                                                                                                                                                               ; ORGANISM: Rattus norvegicus US-11-113-424-60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
US-11-113-424-60
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                                                                                                                                                                           Query Match 2.5%; Score 98; DB 7; Length 984; Best Local Similarity 17.7%; Pred. No. 2.2; Matches 117; Conservative 86; Mismatches 201; Indels 256;
                                                                                                                                                                                                                                                                                                                SOPTWARE: PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 60, Application US/11113424 Publication No. US20050260713A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 904
LENGTH: 2343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/330,773
CURRENT FILING DATE: 2002-12-27
NUMBER OF SEQ ID NOS: 981
SOPTWARE: FASTSEQ for Windows Version 4.0
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CURRENT FILING DATE: 2005-04-21
PRIOR APPLICATION NUMBER: 60/256,704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Gangolli et al.
TITLE OF INVENTION: Polypeptides and Nucleic
FILE REFERENCE: 21402-225
                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 190
                                                                                                                                                                                                                                                                                                                                                            PRIOR PILING DATE: 2001-05-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
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FILING DATE: 2000-12-20
APPLICATION NUMBER: 60/311,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/311,590
                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/294,075
FILING DATE: 2001-05-29
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/322,358 FILING DATE: 2001-09-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 2001-08-29
APPLICATION NUMBER: 60/307,506
FILING DATE: 2001-07-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/315,617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 2001-08-10
                                                 421 QHVSVNITTNQAA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           771 ---ERRTMSKEISV-----IQHTSSFEKSDPPEQPSGLEEDKPPA 807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           663 GIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPA 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           715 EPPAFGSPGPSETAHNRPLGSTKSPAEASKSAPSLEGPTSFQP--RTPKPGAGSEPGK--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          606 EAPVLGATGPADSQHESQHGGLDQDGEA---RPALDGSAALQPLLHTVKAGSPSDMPRDS 662
                                                                                                                                                                                                                                                                                                984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 27.1%;
                                                                                                                                                                                                                                                                                                                               PatentIn Ver. 2.1
AITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRP------
                                                                                                            CD-----DNVE----FVPRQLGLTECRVSISSLWAHTPYTFDIQAI---NGVSSKSPFPP
                                                                                                                                            CDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEGPFKR
                                                                              KTCKQEQTTETTSCLLQNVSPGDYIIBLVDDTNTTRKVMHY---ALKPVHSPWAGPIRAM
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Pred. No. 7.3;
                                                 ----PSTVPIMHQVSATMRSITLSWPQPEQPN 461
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Best Local Similarity
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                                                                                                                                                                                                                                                             553 IDEEPDWFEKOFVPFHPP-----PLRYREP---VLEKFDS-----GLVLNDVMCKPG 596
                                                                                                                                                                                                                                                                                                                    714 ----GÓFTVIQLVGMLRGIAAGMKYLSEMNYVHRDLAARNILVNSNLVCKVSDFGLSRYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      462 GIILDYEI-------RYYEKEHNEFNSSMARSQTNTARI--DGLRPGMVYVVQ
SRPRFAEIVNTLDKMIRNPASLKTVATITAVPSQ----PLLDRSIPDFTAFTTVDDWLSA 922
                                                 DMPRDSGIYD-----
                                                                                                                                                                                                                                                                                                                                                                     LQEPGOHT----AICNMHQF-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SSAALSKFIAVYFDYSCEGDVPGILDLS---TKYR-----LMDNLPQLCSHLHSRDHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---FVVSLVAISIVCSRKRAYSKEAVYSDKLQHYSTGRGSPGMKIYIDPFTYEDPNEAVR
                                                                                                                                                    PESDFCLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QDDTSD----PTYTSSLGGKIPVRWTAPEAIAYRKFTSASDVWSYGIVMWEVMS---
                                                                                                   -----FGERPYWDMSNODVINAIEODYRLPPPMDCPAALHOLMLDCWQXDRN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -RPKVFLCYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIH 413
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                                                 ---SSVPSSELSLPLMEGLSTDQTETSSLTESVSS
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US-11-115-639-31

US-11-115-639-31

Sequence 31, Application US/11115639

Publication No. US20050282242A1

GENERAL INFORMATION:

APPLICANT: Rothstein, David

APPLICANT: Murphy, Christopher

APPLICANT: MacNeil, Ian

TITLE OF INVENTION: AGENTS

FILE REFERENCE: 50150/075003

CURRENT APPLICATION NUMBER: US/11/115,639

CURRENT APPLICATION NUMBER: 60/566,858

PRIOR APPLICATION NUMBER: 60/566,858

PRIOR APPLICATION NUMBER: 60/566,858

PRIOR APPLICATION NUMBER: 60/565,679

PRIOR FILING DATE: 2004-04-27

NUMBER OF SEQ ID NOS: 55

SOPTMARE: PASTSEQ for Windows Version 4.0

SEQ ID NO 31

LENGTH: 2890

TYPE: PRT

ORGANISM: H. Dylori

US-11-115-639-31

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TITLE OF INVENTION: SCREENING ASSAYS FOR ANTIMICROBIAL
TITLE OF INVENTION: AGENTS
FILE REFERENCE: 50150/075003
CURRENT APPLICATION NUMBER: US/11/115,639
CURRENT FILING DATE: 2005-04-27
FRIOR APPLICATION NUMBER: 60/566,858
PRIOR FILING DATE: 2004-04-30
PRIOR FILING DATE: 2004-04-27
NUMBER OF SEQ ID NOMBER: 60/565,679
FRIOR FILING DATE: 2004-04-27
NUMBER OF SEQ ID NOS: 55
SOFTMARE: FASELSEQ for Windows Version 4.0
SEQ ID NO 32
LENGTH: 2890
TYPE: PRT
CORGANISM: H. pylori
US-11-115-639-32
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US-11-115-639-32
; Sequence 32, Application US/11115639
; Publication No. US20050282242A1
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APPLICANT: Murphy, Christopher
APPLICANT: MacNeil, Ian
                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2749
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                                                                                                                                                                        2304 GTASRSQDEREIVASKEGFVRFYNLRTYTNKEGKNIIANRRNASILVVEPKIKAPFDGEL
2424 SIADIIQEGWNVPNRIPYASELLVKONDPIAQDVYAKEKGVIKYYVLEANHLERTHGIKK 248:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2666 ILSEVDG-----IVSFG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2570 AEKEDENTGITSLVVNDYIPSGYKPSLFLE-GANGEEMRYFLEPKTS-----
                                                                                   2364 RIETVYEEVVVSVKNGDQEAKFVLRRSDIVKPSELAGVGGKIEGKVYLPYASGHKVHKGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199 - FWKPRNINISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEGPFKRKTC------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          164 VPFPSIK-----NESNYHPFFFRTRACDLLL-----QPDNLACKP-----
                                                                                                                              87 ---ACHDQVAVTI---
                                                                                                                                                                                                                 45 GPASRNSGLYNIT-----FKYDNCTTYLNPVGKHVIADAQNITISQY-----
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                                       RV--ILEE---LKSEGRQCQQLILK--DPKQLNSSFKRTGMESQPFLNMK-FETDYFVKV 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QVYRRQGVSIADKHIEIIVSQMLRQVRILDSGD-SKFI--
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            --IAISDGSSV-----EQAEVLAKIPKATVKSRDITGGLPRVSELFEARKPKPKDVA 2665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPR-----ERLRPRPKVFL 360
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                                                                                                                                                                                                                                                           2.5%; Score 97; DB 7; Length 2890; ilarity 18.6%; Pred. No. 14; Conservative 68; Mismatches 162; Indels 250;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----AIAEK------LROAKOSSSAALSKFIAVYFDYSCEGDV 488
                                                                                                                              -----LWSPGALGIEFLKGF
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; ORGANISM: H. pylori
US-11-115-639-33
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US-11-115-639-33
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SOPTWARE: FAStSEQ for Windows Version 4.0
SEQ ID NO 33
LENGTH: 2890
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                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 110; Conserv
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CURRENT FILLING DATE: 2005-04-27
PRIOR APPLICATION NUMBER: 60/566,858
PRIOR FILING DATE: 2004-04-30
PRIOR FILING DATE: 2004-04-30
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APPLICANT: MacNeil, Ian
TITLE OF INVENTION: SCREENING ASSAYS FOR ANTIMICROBIAL
TITLE OF INVENTION: AGENTS
FILE REFERENCE: 50150/075003
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2484 GDMVSEKGLFAVIADDNGREAARH---YIARGSEILIDDNSEVSTNSVISKPTTNTFKTI 2540
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                                                                                      SIADIIQEGWNVPNRIPYASELLVKDNDPIAQDVYAKEKGVIKYYVLEANHLERTHGIKK 2483
                                                                                                                                RV--ILEE---LKSEGRQCQQLILK--DPKQLNSSFKRTGMESQPFLNMK-FETDYFVKV 163
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18.6%; Pred. No. 14;
ative 68; Mismatches 162; Indels 2
                                              -----QPDNLACKP----- 198
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SAA ::-	TVA.	AITVPLVVI   : : GIILDYEI-	VNI	I	similarity 6; Conser	T APPLICATION IT FILING DATE: APPLICATION I FILING DATE: APPLICATION I FILING DATE: COP SEQ ID NO. RE: Patentin NO. 85 H: 98 H: 98 PRT ISM: Homo Bal	1A-85 5, Applica n No. US20 PORMATION: Hedimmun INVENTION: INVENTION:	RQG	GRS	g=g	ISD  -  -	DEN	PRN     PYN
LVA	GXGI —SSX	VISJ	THE STATE	ONA!:	ty ervat	ATE: 2 ATE: 2 N NUMBE E: 2004 N NUMBE E: 2004 In vers	atic 0060 : EI	-AII	3-3	QNH	VVISAFATLF:   ::: IAISDGSSV-	IGI I	-FWKPRNLNIS
	-RPKVFLCYSSKDGQN   :    : VRARTVAGYGKFSGK-	AFAT	KTCKQEQTTETTSC:     : ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	DNLACKPF   : DNVE	2. 17. 1tive	ION NUMBER TE: 2005 TE: 2005 TE: 2004 T	ion to the sept and the sept an	AIAEK- :  :  SIADKH	VCSKGMKYFVDK-          TSKDGRSMDYFVDKG	I	FTV	LSTA  : LSCI	J
VVCSK- :   : IVCSRK	K- QNH	TFT	PILO	V- FV	2.4%; 17.6%; ive	ω μομοο	S/1 904 ECE	IBI	GKO (- ;	VQCFAY :   IVSFG-	MCR	AND NO. T.	SDM
PIIGMKYFVDKKNYK  ::    :    : 	RPKVFLCYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKTH   :	AITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRP    ;	KTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIRAM ;       ; ;     ; ;   ; ;     ; ; ;     ; ; ; ;	CDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEGPFKR 	ω	T APPLICATION NUMBER: US/11/203 TF FILING DATE: 2005-08-15 APPLICATION NUMBER: 60/601,634 FILING DATE: 2004-08-16 APPLICATION NUMBER: 60/608,852 FILING DATE: 2004-09-13 OF SEQ ID NOS: 101 RE: Patentin version 3.3 NO 85 H: 984 PRT ISM: Homo sapiens	IA-85 5, Application US/11203251A 6, Application US/11203251A 7, NO. US20060039904A1 7, PORMATION: 1, MEDIATION: 1, MEDIATION: 1, MEDIATION: 1, MEDIATED 1, MEDIAT	AIAEKLRQAKQSSSAALSKF 	VCSKGMKYFVDKKNYKHKGGGRGSGKGELFLVAVS 	CYSSKDGQNHMUVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIV 	PLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPR- 	KQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGFIRAMAITV  :::	FWKDRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEGPFKRKTC 
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APPLICANT: Shenoy, Suresh
APPLICANT: Li, Li
APPLICANT: Li, Li
APPLICANT: Labenoy, Stacie
APPLICANT: Casman, Stacie
APPLICANT: Casman, Stacie
ITILE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoded Thereby
FILE REFERENCE: 21402-251
CURRENT APPLICATION NUMBER: US/10/055,877
CURRENT FILING DATE: 2002-01-22
PRIOR APPLICATION NUMBER: 60/262,892
PRIOR APPLICATION NUMBER: 60/263,598
PRIOR FILING DATE: 2001-01-23
PRIOR APPLICATION NUMBER: 60/263,799
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR APPLICATION NUMBER: 60/264,117
PRIOR PILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 60/264,117
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PRIOR FILING DATE: 2001-01-25
PRIOR APPLICATION NUMBER: 60/264,139
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Publication No. US20050288241A1
GENERAL INFORMATION:
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Kekuda, Ramesh
Guo, Xiaojia
Zerhusen, Bryan
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Zerhusen, b.,
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Taupier Jr., Raymond
Pena, Carol
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Shimkets, Richard
Gusev, Vladimir
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Gerlach, Valerie
Spytek, Kimberly
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Miller, Charles
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PRIOR APPLICATION NUMBER: 60/264,478
PRIOR FILLING DATE: 2001-01-26
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PRIOR APPLICATION NUMBER: 60/272,870
PRIOR PILLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/275,990
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US-10-055-877-253
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1616 CQVKFRLRNTPAPTHLGPTGPTÄTPLEELQAGPSCLPASFTSLVDPQLHTRCP 1668
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                                                                                                                                                                                                                                                              1561 EEDLDEGSGTKRQSVB-VKAHQASHTKYLLMR--GYY--TVPGMVSTRNLNPNDSIVVNS 1615
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 576 EPVLEKFDSGLVLNDVMCKPGPESDFCL----KVEAPVLGATGPADSQHESQHGGLDQDGE 632
                                                                                                                           687 TETSSLTESVSSSSGLGEEEPPALPSKLLSSGSCKADLGCRSYTD-ELHAVAP 738
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Search completed: March 1, 2006, 10:35:08 Job time : 24 secs

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Result
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Gapop 10.0 , Gapext 0.5
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| cgn2_6/ptodata/1/iaa/5_COMB.pep:*
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| cgn2_6/ptodata/1/iaa/H_COMB.pep:*
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Copyright (c) 1993 - 2006 Biocceleration Ltd
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BB
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US-09-167-747-259-18
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401 KBGCKBWATGKTHERTHILLIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHI	אסע דע מעעני פון זא נסעים מייניסעניעטעניעטעניעטעניעטעניעטעניעטעניעט	341 STYTAALPRERLRPREKVFLCYSSKOGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLC 4 	281 KVMHYALKPVHSPWAGPIRAMAITVPLVVISAFATLFTVMCRKKQQENIVSHLDEESSES 3	221 APHNEGEREFYLHYKLKHEGPEKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTR 2	161 VKVVPFPSIKNESNYHPFFFRTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDH 2 	101 GALGIEFLKGFRVILBELKSEGRQCQQLILKDFXQLNSSFKRTGMESQPFLNMKFETDYF 1 	41 WRGWGPASRNSGLYNITFKYDNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSP 1  -	ery Match 93.9%; Score 3706; DB 2; Length 728; st Local Similarity 99.4%; Pred. No. 0; ches 694; Conservative 2; Mismatches 2; Indels 0; Gaps	28 134.5 3.4 504 2 US-09-949-016-11658 Sequence 11659, A 29 117.5 3.0 617 2 US-09-188-930-303 30 117.5 3.0 617 2 US-09-138-930-303 31 116 2.9 552 2 US-09-949-016-8005 32 110.5 2.8 549 2 US-09-949-016-8005 33 106.5 2.7 499 2 US-09-949-016-8304 34 105.5 2.7 595 1 US-08-368-3826 35 105.5 2.7 595 1 US-08-368-3826 36 105.5 2.7 970 2 US-09-31-83-1 37 105 2.7 993 1 US-08-388-392-664 38 105 2.7 993 1 US-08-388-392-664 39 105 2.7 993 1 US-08-388-39-1 40 105 2.7 993 2 US-09-518-92-35-1 40 105 2.7 993 2 US-09-518-20 41 103.5 2.6 998 1 US-08-348-20 42 103.5 2.6 998 1 US-08-348-20 43 103.5 2.6 998 1 US-08-348-20 44 103.5 2.6 998 1 US-08-348-20 45 101 2.6 838 2 US-09-999-16-9916 45 101 2.6 838 2 US-09-999-16-9916 45 101 2.6 838 2 US-09-999-16-9917 45 101 2.6 838 2 US-09-999-16-9916 46 101 2.6 838 2 US-09-999-16-9916 47 11LIKG DATE: US/10104047 48 PAPLICANT: NUMBER: US/10104047 49 PAPLICANTION: NO. 6943241el full length cDNA 49 FILE REPERBNOE: H1.A0105 40 SOFTWARE: PATCH NUMBER: US/10/104,047 41 US-08-702-678-20 42 US-09-999-99-016-9917 43 US-08-702-678-20 44 US-09-999-99-016-9917 45 US-08-702-678-20 46 US-09-999-99-016-9917 47 URENT FILIKG DATE: US/10/104,047 48 US-08-702-678-20 49 US-09-999-99-016-9917 49 US-08-702-678-20 49 US-09-999-99-016-9917 49 US-08-702-678-20 49 US-09-999-99-016-9917 49 US-08-702-678-20 49 US-09-999-99-016-9917 49 US-08-702-08-	
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APPLICANT: WOOD, William
APPLICANT: YANBULE, Daniel
FILE REFERENCE: P1381RIC1P1(US)
CURRENT APPLICATION NUMBER: US/09/747,259
CURRENT APPLICATION NUMBER: US/09/747,259
CURRENT FILING DATE: 2000-12-20
PRIOR APPLICATION NUMBER: US 60/172,096
PRIOR PILING DATE: 1999-12-23
PRIOR APPLICATION NUMBER: US 60/173,481
PRIOR PILING DATE: 1999-12-30
PRIOR PILING DATE: 1999-12-30
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PRIOR APPLICATION NUMBER: US 60/175,481
PRIOR APPLICATION NUMBER: US 60/191,007
PRIOR APPLICATION NUMBER: US 60/213,087
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Watanabe, Colin
Williams, P.Mickey
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Hillan, Kenneth
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Grimaldi, Christopher
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PRIOR APPLICATION NUMBER: US 60/242,837
PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: PCT/US00/30873
PRIOR FILING DATE: 2000-11-10
PRIOR APPLICATION NUMBER: US 60/253,646
PRIOR APPLICATION NUMBER: US 60/253,646
PRIOR FILING DATE: 2000-11-28
PRIOR FILING DATE: 2000-12-01
PRIOR FILING DATE: 2000-12-01
NUMBER OF SEQ ID NOS: 39
SEQ ID NO 18
LENGTH: 728
TYPE: PRT
ORGANISM: Homo Sapien
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PGALGIEFLKGFRVILEELKSEGRQCQQLILKDPKQLNSSFKRTGMESQPFLAMKFETDY
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TETSSLTESVSSSSGLGEEEPPALPSKLLSSGSCKADLGCRSYTDELHAVAP
                                                                                      FHPPPLRYREPVLEKFDSGLVLNDVMCKPGPESDFCLKVEAAVLGATGPADSQHESQHGG
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                                   LDQDGEARPALDGSAALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLSTDQ
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RESULT 3 US-09-816-744-18 ; Sequence 18, Application US/09816744 ; Patent No. 6579520 ; GENERAL INFORMATION:

Chen, Jian

Filvaroff, Ellen

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FILE REPERENCE: PL38IRICIPE (US)
FILE REPERENCE: PL38IRICIPE (US)
CURRENT APPLICATION NUMBER: US/09/816,744
CURRENT FILLING DATE: 2001-03-22
Prior application data removed - consult PALM or file W. NUMBER OF SEQ ID NOS: 39
SEQ ID NO 18
ENGTH: 728
TYPE: PRT
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Best Local Similarity 97.5%;
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LDQDGEARPALDGSAALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLSTDQ
                                           FHPPPLRYREPVLEKFDSGLVLNDVMCKPGPESDFCLKVEAAVLGATGPADSQHESQHGG
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US-08-620-694A-10
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Best Local &
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MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
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NAME: Perkins, Patricia Anne
REGISTRATION UNMBER: 34,695
REFERENCE/DOCKET NUMBER: 2617
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 08/538,765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Spriggs, Melanie
APPLICANT: Fanalow, William
TITLE OF INVENTION: No. 5869286el Receptor That Binds IL-17
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                                                                                                                                                                                                                                                                                                                                      TYPE: amino acids
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CLASSIFICATION:
                                                                                                                                                                                                                              Local Similarity
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CLASSIFICATION:
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                                                                    100 LQTDASILYLEGAELSVLQLNTNERLCVR--FEFLSKLRHHHRRWRFTFSHFV-VDPDQE
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RESULT 5
US-09-022-255-10
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CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION UNMBER: USSN 08/620,694
FILING DATE: 21 MARCH 1996
APPLICATION UNMBER: USSN 08/538,765
FILING DATE: 7 AUGUST 1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Yao, Zhengbin
APPLICANT: Spriggs, Melanie
APPLICANT: Panslow, William
TITLE OF INVENTION: NO. 6072033el Receptor That Binds IL-17
NUMBER OF SEQUENCES: 10
                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/022,255
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                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                      CITY: Seattle
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51 University Street
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SEQUENCE CHARACTERISTICS:
LENGTH: 866 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
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Best Local Similarity
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FILING DATE: 23 MARCH 1995
ATTORNEY/ACENT INFORMATION:
NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,695
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                                                                                                                                                                                                                                                                                                                                        CYFSEVSCOGDVPDLFGAAPRYPLMDRFEEV--YFRIQDLEMFQPGRMHRVGELSGDNYL
                                                                                                                                                                                                                                                                                                                                                                           VYF-DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQG--SRRNYF 534
                                                                                                                                                                                                                                                                                                                                                                                                                  TR----AKWQALLGRGAPVRLRCDHGKPVGDLFTAAMMILPDFKR-----PACFGTYVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                     MKYFVDKKNYKHKGGG------RGSGKGELFLVAVSATAEKLRQAKQSSSAALSKFIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YVDVÝLKFAQFLLTACGTEVÁLDLLEEQAISEAGVMTWÝGRQKQEMVESNSKÍ Í VLCSRG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SVILLIVCMTWRLAGPGS---EKYSDDTKYTDGLPAADLIPPPLKPRKVWIIYSA-DHPL 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LQTDASILYLEGAELSVLQLNTNERLCVR--FEFLSKLRHHHRRWRFTFSHFV-VDPDQE 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -PGALGIEFLKGFRVILEELKSEGRQCQQLILKDPKQLNSSFKRTGMESQPFLNMKFETD 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCTVKNSTCLDDSWIHP------RNLTPSSPKDLQIQLHFAHTQQGDLFPVAHIEWT
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                                                                                                                                                                                                                 VLNDVMCKPGPESDFCLKVEAPVLGATGPADSQHESQH-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCLLONVSPGDYIIELVDDT---NTTRKVMHYALKPVHSPWAGPIRAMAITVPLVVISAF
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                  PL--GSSTPMASPDLLPEDVR-----EHLEGLMLSLFEQSLSCQAQGGC
                                                         PLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSCKADLGC
                                                                                                                                       -----GGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSL
                                                                                                                                                                            VKRAPLVRE-PGSQACLAID-PLVGEEGGAAVAKLEPHLQPRGQPAPQPLHTLVLAAEEG
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                                                                                                  -RNSVLF---LPVDPEDS
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 10, App. Patent No. 60720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein 022-696-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS LENGTH: 866 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Ploppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Spriggs, Melanie
APPLICANT: Fanalow, William
TITLE OF INVENTION: No. 6072037el Receptor That Binds IL-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 0:
FILING DATE: 23 MARCH 1995
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MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,695
REFERENCE/DOCKET NUMBER: 261
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CLASSIFICATION:
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CLASSIFICATION:
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275 GCCRHQVQIQPFFSSCLNDCLRHSATVSCPEMPDTPEPIPDYMPLWVYWFITGISILLVG 334
                                          257
                                                                                  216 QLRVSFTLWNESTHYQILLTSFPHMENHSCFEHMH-HIPAPRPEEFHQRSNVTLTLRNLK 274
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                                                                                                                                                                                                                                                                                                                                                                                     55 NITEKYDNC--TTYLNPVGKHVIADAQNIT-----ISQYACHDQ-----VAVTILWS
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                                        SCLLQNVSPGDYIIELVDDT---NTTRKVMHYALKPVHSPWAGPIRAMAITVPLVVISAF
                                                                                                                             -----NISOHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEGPFKRKTCKQEQTTETT
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51 University Street
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atent No. 6083906
GENERAL INFORMATION:
                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: Apple PowerMacintosh
OPERATING SYSTEM: Apple Operating System 7.5
SOFTWARE: Microsoft Word for PowerMacintosh,
CURRENT APPLICATION DATA:
                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia Ann
REGISTRATION NUMBER: 34,693
                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 60/052,525
FILING DATE: 27 NOVEMBER 1996
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
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                                                                                            TELECOMMUNICATION INFORMATION:
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STREET: 5:
Seattle
                                                                           TELEPHONE:
                                                                                                                  REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                               CLASSIFICATION: 530
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           426 MKYFVDKKNYKHKGGG------RGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIA 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                391 YVDVVLKFAQFLLTACGTEVALDLLEEQAISEAGVMTWVGRQKQEMVESNSKIIVLCSRG 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              335 SVILLIVCMTWRLAGPGS---EKYSDDTKYTDGLPAADLIPPPLKPRKVWIIYSA-DHPL 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314 ATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRP----KVFLCYSSKDGQN
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866 amino acids
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                                                           (206)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Immunex Corporation
                                                                           (206) 587-0430
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Method of Regulating Nitric Oxide Production
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                                                                                                                  2623-A
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RESULT 8
US-09-022-253-10
IS-09-022-253-10
Sequence 10, Application US/09022253
Patent No. 6096305
Patent No. 6096305
APPLICANT: Yao, Zhengbin
APPLICANT: Spriggs, Melanie
APPLICANT: Spriggs, Melanie
APPLICANT: Fanslow, William
TITLE OF INVENTION: No. 6096305el Receptor That Binds IL-17
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
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; MOLECULE TYPE:
US-08-978-773-4
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    ADDRESSEE:
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  Immunex Corporation
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INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 866 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 176; Conservative 104; Mismatches 342; Indels 148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 8.0%; Score 315; DB 2; Length 866; Best Local Similarity 22.9%; Pred. No. 5.7e-24;
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: U
FILING DATE: 23 MARCH
CLASSIFICATION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5
SOFTWARE: Microsoft Word for Apple, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/022,253
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REGISTRATION NUMBER: 34,695
REFERENCE/DOCKST NUMBER: 2617-B
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: US/08/620,694
FILING DATE: 21-MARCH-1996
APPLICATION NUMBER: USSN 08/538,765
FILING DATE: 7 AUGUST 1995
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MKYFVDKKNYKHKGGG------RGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIA 477
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                                                                 YVDVVLKFÄQFILTACGTEVÄLDILEEQAISEAGVMTWVGRQKQEMVESNSKIIVLCSRG
                                                                                                                                                     SVILLIVCMTWRLAGPGS---EKYSDDTKYTDGLPAADLIPPPLKPRKVWIIYSA-DHPL 390
                                                                                                                                                                                          ATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRP----KVFLCYSSKDGQN
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Query Match
                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,695
REFERENCE/DOCKET NUMBER: 2617-B
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: Apple Power Macintosh
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Spriggs, Melanie
APPLICANT: Fanslow, William
TITLE OF INVENTION: No. 6100235el Receptor That Binds IL-17
NUMBER OF SEQUENCES: 10
                         MOLECULE TYPE:
                                                                        SEQUENCE CHARACTERISTICS LENGTH: 866 amino acids
                                                                                                                                                                                                                              CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                  CLASSIFICATION: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                        FILING DATE: 2
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 98101
                                                                                                                                                                                                                                                                        FILING DATE:
                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
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                                                                                                                           TELEPHONE:
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51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                  (206)
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                                                                                                                              (206) 587-0430
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Score 315;
DB
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Length 866;
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                                                                                                                                                                 Sequence 10,
Patent No. 6
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                                                   STREET:
                                                               ADDRESSEE:
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370 HMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWV----IQKIHESQFIIVVCSKG 425
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                                                                                                                        ALVAAVEPGPLADGAAVRLALAGEGEACPLLGSPGAG-----RNSVLF---LPVDPEDS
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                                                       PLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSCKADLGC
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PL--GSSTPMASPDLLPEDVR-----EHLEGLMLSLFEQSLSCQAQGGC
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O9-02-259-10
O9-022-259-10
O9-022-259-10
O9-022-259-10
Atent No. 6191104
GENERAL INFORMATION:
APPLICANT: Yao, Zhengbin
APPLICANT: Spriggs, Welanie
APPLICANT: Fanslow, William
TITLE OF INVENTION: No. 6191104el Receptor That Binds IL-17
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
CITY: Seattle
STATE: WA
COUNTRY: USA
ZIP: 98101
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COMPUTER READABLE FORM:

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; TOPOLOGY: linear ; MOLECULE TYPE: protein US-09-022-259-10
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Best Local Similarity
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LENGTH: 866 amino acide
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APPLICATION NUMBER: USSN 01
FILING DATE: 23 MARCH 1995
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/620,694
FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia Anne
REGISTRATION UNMEER: 34,695
REFERENCE/DOCKET NUMBER: 2617-B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
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COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.
SOPTWARE: Microsoft Word for Apple, Version 6
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CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                    314 ATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRP----KVFLCYSSKDGQN 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100 LQTDASILYLEGAELSVLQLNTNERLCVR--FEFLSKLRHHHRRWRFTFSHFV-VDPDQE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100 -PGALGIEFLKGFRVILEELKSEGRQCQQLILKDPKQLNSSFKRTGMESQPFLNMKFETD
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                                                                                                                                                                                                                                                            YVDVVLKFAQFLLTACGTEVALDLLEEQAISEAGVMTWVGRQKQEMVESNSKIIVLCSRG
RSKSGRSLYVAICNMHQFIDEEPDWFE------KQFVPFHPPPLRYREPVLEKFDSGL
                                                CYFSEVSCOGDVPDLFGAAPRYPLMDRFEEV--YFRIQDLEMFQPGRMHRVGELSGDNYL
                                                                                                    VYF-DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQG--SRRNYF 534
                                                                                                                                                                                                      MKYFVDKKNYKHKGGG------RGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIA
                                                                                                                                                                                                                                                                                                                HMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWV----IQKIHESQFIIVVCSKG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCLLQNVSPGDYIIELVDDT---NTTRKVMHYALKPVHSPWAGPIRAMAITVPLVVISAF 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCTVKNSTCLDDSWIHP-----RNLTPSSPKDLQIQLHFAHTQQGDLFPVAHIEWT
                                                                                                                                                        TR----AKWQALLGRGAPVRLRCDHGKPVGDLFTAAMNMILPDFKR-----PACFGTYVV 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----NISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEGPFKRKTCKQEQTTETT 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YEVTVHHLPKPIPDGDPNHQSKNFLVPDCEHARMKVTTPCMSSGSLWDP-NITVETLEAH
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                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 866 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 10, Application US/09022257 Patent No. 6197525 GENERAL INFORMATION:
                                                                           Matches
                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,695
REFERENCE/DOCKET NUMBER: 2617-B
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: U
FILING DATE: 23 MARCE
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OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/022,257
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APPLICANT: Fanalow, William
TITLE OF INVENTION: No. 6197525el Receptor That Binds IL-17
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                       MOLECULE TYPE:
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APPLICATION NUMBER:
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                                                                                             Local Similarity
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CLASSIFICATION:
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                                   55 NITFKYDNC--TTYLNPVGKHVIADAQNIT-----ISQYACHDQ-----VAVTILWS 99
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                                                                                                                                                                                                                                                                                                                                                                                                                                    23 MARCH 1995
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                                                                                           8.0%; Score 315; DB 2; 22.9%; Pred. No. 5.7e-24;
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-----RNLTPSSPKDLQIQLHFAHTQQGDLFPVAHIEWT
                                                                        Mismatches 342;
                                                                                                             Length 866;
                                                                           Indels
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RESULT 12
US-09-549-679-10
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GENERAL INFORMATION:
                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Apple, Version 6.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                    Spriggs, Melanie
Fanslow, William
TITLE OF INVENTION: No. 6680057el Receptor
NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Yao,
                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                               STATE: WA
                                                                                                                                                                                                                                       ADDRESSEE: Immunex Corporation STREET: 51 University Street
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                                                                                                                                                                                                                   CITY: Seattle
  APPLICATION NUMBER: US/09/549,679
                                                                                                                                                    ZIP: 98101
                                                                                                                                                                        COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09549679
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION
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APPLICATION NUMBER: 08/620,694
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314 ATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRP----KVFLCYSSKDGQN 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              159 YFVKV--VPFPSIKNESNYHPFFFRTRACDLLLQPDNLACK---PFWKPRNL-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                           VYF-DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQG--SRRNYF
                                                                                                                                                                                                                                                                                                                             TR----AKWOALLGRGAPVRLRCDHGKPVGDLFTAAMNMILPDFKR-----PACFGTYVV 501
                                                                                                           VLNDVMCKPGPESDFCLKVEAPVLGATGPADSQHESQH---
                                                                                                                                                  RSPGGRQLRAALDRFRDWQVRCPDWFECENLYSADDQDAPSLDEEV-FEEPLLPP-GTGI
                                                                                                                                                                                               RSKSGRSLYVAICNMHQFIDEEPDWFE-----KQFVPFHPPPLRYREPVLEKFDSGL
                                                                                                                                                                                                                                         CYFSEVSCDGDVPDLFGAAPRYPLMDRFEEV--YFRIQDLEMFQPGRMHRVGELSGDNYL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: USSN 08/410,535
FILING DATE: 23 MARCH 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 14-Apr-2000 CLASSIFICATION: <Unknown>
                                                                   VKRAPLVRE-PGSQACLAID-PLVGEEGGAAVAKLEPHLQPRGQPAPQPLHTLVLAAEEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE:
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-GGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSL
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Pred. No. 5.7e-24;
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GENERAL INFORMATION:
APPLICANT: MOHLER, Kendall M.
APPLICANT: MOHLER, Kendall M.
TITLE OF INVESTION: Methods for Treating Rhe
FILE REFERENCE: 2982-A
CURRENT APPLICATION NUMBER: US/10/033,522
CURRENT FILING DATE: 2001-10-18
PRIOR APPLICATION NUMBER: US 60/241,230
PRIOR FILING DATE: 2000-10-18
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
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8.0%; Score 315; DB 2; Length 866;
Best Local Similarity 22.9%; Pred. No. 5.7e-24;
Matches 176; Conservative 104; Mismatches 342; Indels 1
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                                                                RSPGGROLRAALDRFRDWQVRCPDWFECENLYSADDQDAPSLDEEV-FEEPLLPP-GTGI
                                                                                                                                               CYFSEVSCDGDVPDLFGAAPRYPLMDRFEEV--YFRIQDLEMFQPGRMHRVGELSGDNYL
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VLNDVMCKPGPESDFCLKVEAPVLGATGPADSQHESQH-----
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                                                                                                      RSKSGRSLYVAICNMHQFIDEEPDWFE-----KQFVPFHPPPLRYREPVLEKFDSGL
                                                                                                                                                                                                                              TR----AKWOALLGRGAPVRLRCDHGKPVGDLFTAAMNMILPDFKR-----PACFGTYVV
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PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 10823
SOPTWARE: FASTSEQ for Windows Version 4.
SEQ ID NO 403
LENGTH: 866
TYPE: PRT
ORGANISM: Human
US-09-949-002-403
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APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH INFLAMMATORY AUTOIMMUNE DISEASE, METHODS
TITLE OF INVENTION: AND USES THEREOF
FILE REFERENCE: CL000790
CURRENT APPLICATION NUMBER: US/09/949,002
CURRENT FILING DATE: 2000-01-28
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Best Local S
Matches 176
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          % Match 8.0%; Score 315; DB 2; Local Similarity 22.9%; Pred. No. 5.7e-24;
1es 176; Conservative 104; Mismatches 342;
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                         CYPSEVSCOGOVPOLFGAAPRYPLMDRFEEV--YFRIQDLEMFQPGRMHRVGELSGDNYL
                                                            VYF-DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQG--SRRNYF 534
                                                                                                                                                                                                                                                                         SVILLIVCMTWRLAGPGS---EKYSDDTKYTDGLPAADLIPPPLKPRKVWIIYSA-DHPL
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                                                                                                                                             MKYFVDKKNYKHKGGG------RGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIA 477
                                                                                                                                                                                    YVDVVLKFAQFILITACGTEVALDLLEEQAISEAGVMTWVGRQKQEMVESNSKIIVLCSRG
                                                                                                                                                                                                                                 HMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWV----IQKIHESQFIIVVCSKG 425
                                                                                                                                                                                                                                                                                                                                                           GCCRHQVQIQPFFSSCLNDCLRHSATVSCPEMPDTPEPIPDYMPLWVYWFITGISILLVG
                                                                                                                                                                                                                                                                                                                                                                                                                                            OLRVSFTLWNESTHYOILLTSFPHMENHSCFEHMH-HIPAPRPEEFHQRSNVTLTLRNLK
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                                                                                                         TR----AKWQALLGRGAPVRLRCDHGKPVGDLFTAAMNMILPDFKR-----PACFGTYVV
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US-09-949-002-412
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US-09-949-002-412
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APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH INFLAMMATORY AUTOIMMUNE DISEASE, METHODS OF DETECTION
TITLE OF INVENTION: AND USES THEREOF
FILE REFERENCE: CL000790
CURRENT APPLICATION NUMBER: US/09/949,002
CURRENT APPLICATION NUMBER: 000-01-28
PRIOR PILING DATE: 2000-09-08
PRIOR PILING DATE: 2000-09-08
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 412
LENGTH: 876
TYPE: PRT
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Best Local Similarity
Matches 176; Conserv
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Patent No. 6900016
426 MKYFVDKKNYKHKGGG------RGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIA 477
                                                                          401 YVDVVLKPAQPLLTACGTEVALDLLEEQAISEAGVMTWVGRQKQEMVESNSKIIVLCSRG
                                                                                                                                                                                                                                314 ATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRP----KVFLCYSSKDGQN 369
                                                                                                                                                                                                                                                                                                                                  257 SCLLQNVSPGDYIIELVDDT---NTTRKVMHYALKPVHSPWAGPIRAMAITVPLVVISAF 313
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                                                                                                          HMAVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWV----IQKIHESQFIIVVCSKG 425
                                                                                                                                                                             SVILLIVCHTWRLAGPGS---EKYSDDTKYTDGLPAADLIPPPLKPRKVWIIYSA-DHPL 400
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	737 PLGSSTPMASPDLLPEDVREHLEGLMLSLFEQSLSCQAQGGC 778	737	망
	677 PLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSCKADLGC 726	. 677	ş
736	686 ALVAAVEPGPLADGAAVRLALAGEGEACPLLGSPGAGRNSVLFLPVDPEDS 736	686	뭥
676	GGLDQDGEARPALDGSAALQPLLHTVKAGSPSD	625	ş
685	628 VKRAPLVKE-PGSQACLAID-PLVGEEGGAAVAKLEPHLQPRGQPAPQPLHTLVLAAEEG	628	뮍
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627	570 RSPGGRQLRAALDRFRDWQVRCPDWFECENLYSADDQDAPSLDEEV-FEEFLLPP-GTGI 627	570	뮍
586	535 RSKSGRSLYVAICNMHQFIDEEPDWFB	535	S
569	512 CYFSEVSCDGDVPDLFGAAPRYPLMDRFEEVYFRIQDLEMFQPGRMHRVGELSGDNYL 569	512	밁
534	478 VYF-DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQBPGQHTRQGSRRNYF 534	478	Ş
511	461 TRAKWQALLGRGAPVRLRCDHGKPVGDLFTAAMNMILPDFKRPACFGTYVV 511	461	망

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## SUMMARIES

24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	o.	v	4	w	2	<b>–</b>	Result No.
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## ALIGNMENTS

AAU09904 standard; protein; 738 AA.

AAU09904;

14-FEB-2002 (first entry)

Human Interleukin 17 (hIL-17) receptor like protein.

Interleukin 17; hIL-17 receptor like protein; immunomodulatory; anti-inflammatory; anti-diabetic; immunosuppressive; anti-microbial; hepatic; anabolic; anorectic; anti-alzheimer's; anti-parkinsonian; anti-convulsant; anti-asthmatic; dermatological; renal; osteopathic; vascular; cytostatic; anti-leukaemic; anti-infertility; ophthalmological; hepatitis; anorexia; cachexia; neuronal dysfunction; lung disease; disease; vascular disorder; eye disorder;

Homo sapiens.

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WO200168859-A2. *:*.

20-SEP-2001.

15-MAR-2001; 2001WO-US008678.

16-MAR-2000; 2000US-0189816P. 28-NOV-2000; 2000US-00724460.

(AMGE-) AMGEN INC.

Jing S;

WPI; 2001-611392/70. N-PSDB; AAS15346.

Nucleic acids encoding interleukin 17 receptor like polypeptides, useful for preventing, diagnosing and treating, e.g. leukemia, asthma, diabetes, psoriasis and glaucoma.

Claim 2; Page 152-154; 158pp; English.

immunosuppressive, hepatic, anabolic, anorectic, anti-alzheimer's, anti-parkinsonian; anti-convulsant, anti-asthmatic, dermatological, The invention describes novel nucleic acids encoding interleukin (IL) 17 receptor like polypeptides useful as vaccines and in gene therapy. These have immunomodulatory, anti-inflammatory, anti-diabetic, anti-microbial, immunosuppressive, hepatic, anabolic, anorectic, anti-alzheimer's, renal,

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CC transplant rejection), infections (e.g. hepatitis and septicaemia), weight disorders (e.g. anorexia, cachexia and bepiticaemia), codysfunction (e.g. Alzheimer's disease, Parkinson's disease and epilepsy), codysfunction (e.g. Alzheimer's disease, Parkinson's disease and epilepsy), codysfunction (e.g. cystic fibrosis, asthma and emphysema), skin disease (e.g. cystic fibrosis, asthma and emphysema), skin disease (e.g. eczema and psoriasis), kidney disease (e.g. glomerulonephritis), codysfunction (e.g. stroke and atherosclerosis, cancers (e.g. glomerulonephritis), codysfunction (e.g. stroke and atherosclerosis, cancers (e.g. leukemia, myeloma and codysfunction (e.g. stroke and atherosclerosis, cancers (e.g. leukemia, myeloma and codysfunction (e.g. glaucoma and retinal neuropathy). The complements may also used as diagnostic probes to detect and companitate the presence of similar nucleic acids in samples and intifuction of surlbodies against the proteins and in codysfunction of antibodies against the proteins and in codysfunction of antibodies against the proteins and in codysfunction of expression and activity. The anti-codysfunction of antibodies and activity. The anti-codysfunction of the amino acid sequence of the human codysfunction in the method of the charaction.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel isolated SEF (similar expression of FGF genes) nucleic acid molecule (I). An SEF of the invention has cytostatic, cardiovascular-gen., antiarteriosclerotic, cardiant, vasotropic, cardiovascular-gen., antiarteriosclerotic, cardiant, vasotropic, hypotensive, and mephrotropic activity, and may have a use in gene therapy. The SEF nucleic acids and polypeptides can be used for diagnostic assays, prognostic assays, and monitoring clinical trials. They can also be used for treating a subject at risk of or susceptible to a disorder or having a disorder associated with aberrant or unwanted SEF expression or activity. The SEF molecules can also be used for monitoring, treating, or disposing proliferative and/or differentiative disorders, e.g. ovarian cancer, breast cancer, colon cancer, prostatic cancer, FGF related disorder, cardiovascular disorder including
                                                                                                                                                                    arteriosclerosis, coronary artery disease, ischemia, reperfusion injury, restenosis, arterial inflammation, hypertension, endothelial disorders, and a kidney disorder, e.g. glomerular disorderiative, vascular nephropathy, renal failure, or glomerular disease. The SEF molecules can also be used as markers of disorders or disease states, as markers for precursors of disease states, as markers for predisposition of disease states, as markers, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of disease states, as markers for predisposition of d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated SEF nucleic acid and polypeptide, useful for monitoring, treating, or diagnosing proliferative and/or differentiative disorders, e.g. ovarian cancer, breast cancer, or cardiovascular disorder including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fibroblast growth factor; SEF; similar expression of FGF genes; cytostatic; cardiovascular-gen.; antiarteriosclerotic; cardiant; vasotropic; hypotensive; nephrotropic; gene therapy; diagnosis; prognosis; proliferative disorders; cardiovascular disorders;
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Best Local Similarity
Matches 738; Conserv
Interleukin 17; hIL-17 receptor like protein; immunomodulatory; anti-inflammatory; anti-diabetic; immunosuppressive; anti-microbial; hepatic; anabolic; anorectic; anti-alzheimer's; anti-parkinsonian; anti-convulsant; anti-asthmatic; dermatological; renal; osteopathic; vascular; cytostatic; anti-leukaemic; anti-infertility; ophthalmological;
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mutein.
                               hepatitis; anorexia; cachexia; neuronal dysfunction; lung disease;
bone disease; vascular disorder; eye disorder; cancer; human; muta
                                   human; mutant;
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Homo sapiens. Synthetic.

Misc-difference Key Location/Qualifiers

/label= Ser, Thr, Ala, g S

WO200168859-A2

20-SEP-2001

15-MAR-2001; 2001WO-US008678

16-MAR-2000; 2000US-0189816P. 28-NOV-2000; 2000US-00724460.

(AMGE-) AMGEN INC.

Jing

WPI; 2001-611392/70

Nucleic acids encoding inte for preventing, diagnosing psoriasis preventing, diagnos. riasis and glaucoma. interleukin 17 receptor like polypeptides, useful sing and treating, e.g. leukemia, asthma, diabetes,

Claim 20; Page; 158pp; English

cc transplant rejection), infections (e.g. hepatitis and septicaemia), cc weight disorders (e.g. anorexia, cachexia and obesity), neuronal cc dysfunction (e.g. Alzheimer's disease, Parkinson's disease and epplicaemia), cc lung disorders (e.g. cystic fibrosis, asthma and emphysema), skin disease (e.g. eczema and psoriasis), kidney disease (e.g. glomerulonephritis), cc bone diseases (e.g. osteoporosis and hypercalcaemia), vascular disorders (e.g. stroke and atherosclerosis, cancers (e.g. leukemia, myeloma and cc miscarriage), eye disorders (e.g. leukemia, myeloma and cc miscarriage), eye disorders (e.g. glaucoma and retinal neuropathy). The cc miscarriage), eye disorders (e.g. glaucoma and retinal neuropathy). The cc miscarriage), eye disorders (e.g. glaucoma and retinal neuropathy). The cc miscarriage) researce of similar nucleic acids in samples and identify patients needing restorative therapy. The IL17rlp may also be used as antigens in the production of antibodies against the proteins and in cassays to identify modulators of expression and activity. The anticc specification but is based on the human Interleukin 17 (IL-17) receptor collike protein sequence (AAU09904) and has been created according to construct the created according to information given in claim 20 anti-parkinsonian, anti-convulsant, anti-asthmatic, dermatological, osteopathic, vascular, cytostatic, anti-leukaemic, anti-infertility and ophthalmological activities. The II-17 receptor like nucleic acids and proteins may be used to prevent and treat diseases associated with inappropriate II-17 receptor like polypeptide (IL17rlp) expression. These include, for example immune disorders (e.g. inflammation, diabetes and The invention describes novel nucleic acids encoding interleukin (II) 17 receptor like polypeptides useful as vaccines and in gene therapy. These have immunomodulatory, anti-inflammatory, anti-diabetic, anti-microbial, immunosuppressive, hepatic, anabolic, anorectic, anti-alzheimer's, renal,

Sequence ß,

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Query Match
Best Local S
Matches 737
        Similarity
99.9%;
nilarity 99.9%;
Conservative
Score 3944; D
Pred. No. 0;
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5 DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKS 120

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                                                                 Homo sapiens.
Synthetic.
                   Misc-difference
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RTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEG

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RTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEG

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creceptor like polypeptides useful as vaccines and in gene therapy. These
chave immunomodulatory, anti-inflammatory, anti-diabetic, anti-microbial,
cimmunosuppressive, hepatic, anabolic, anorectic, anti-alrahmer's, renal,
consteopathic, vascular, cytostatic, anti-leukaemic, anti-infertility and
consteopathic, vascular, cytostatic, anti-leukaemic, anti-infertility and
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consteopathic IL-17 receptor like proteins and activity. Note: This sequence is not given in the
consteopathic IL-17 receptor like proteins and activity. Note: This sequence is not given in the
confidence of AbJ09904) and has been created according to
consteopathic IL-17 receptor
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28-NOV-2000; 2000US-00724460.
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                                                                                                                                                                                                                                                                                                                                                                                        information given
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Interleukin 17; hIL-17 receptor like protein; immunomodulatory; anti-diabetic; immunosuppressive; anti-microbial; anti-inflammatory; anti-diabetic; immunosuppressive; anti-microbial; hepatic; anabolic; ancorectic; anti-alzheimer; anti-parkinsonian; anti-convulsant; anti-asthmatic; dermatological; renal; osteopathic; vascular; cytostatic; anti-leukaemic; anti-infertility; ophthalmological; hepatitis; anorexia; cachexia; neuronal dysfunction; lung disease; bone disease; vascular disorder; eye disorder; cancer; human; mutant;
                                 16-MAR-2000; 2000US-0189816P.
28-NOV-2000; 2000US-00724460.
                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
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Query Match Best Local Similarity Matches 737; Conserv

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Score 3941; Pred. No. 0; Mismatches

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737; Conservative

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EGRQCQQLILKDFKQLNSSFKRTGMESQPFLNMKFETDYFVKVVPFPSIKNESNYHPFFF 180 DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKS DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKS MAPWLQLCSVFFTVNACLNGSQLAVAAGGSGRAWGVDTCGWRGVXPASRNSGLYNITFKY MAPWLQLCSVFFTVNACLNGSQLAVAAGGSGRAWGVDTCGWRGVGPASRNSGLYNITFKY

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RTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNEGFRFFYLHYKLKHEG

PFKRKTCKQBQTTETTSCLLQNVSPGDYIIBLYDDTNTTRKVMHYALKPVHSPWAGPIRA

300 300

240 240 180

PFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIRA

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CC The invention describes novel nucleic acids encoding interleukin (IL) 17 creceptor like polypeptides useful as vaccines and in gene therapy. These CC have immunomodulatory, anti-inflammatory, anti-diabetic, anti-microbial, immunosuppressive, hepatic, anabolic, anorectic, anti-alrahimer's, renal, CC anti-parkinsonian, anti-convulsant, anti-asthmatic, dermatological, CC anti-parkinsonian, anti-convulsant, anti-leukaemic, anti-infertility and ophthalmological activities. The IL-17 receptor like nucleic acids and CC proteins may be used to prevent and treat diseases associated with CC inappropriate IL-17 receptor like polypeptide (III7rlp) expression. These cinclude, for example immune disorders (e.g. inflammation, diabetes and ctransplant rejection), infections (e.g. hepatitis and septicaemia), CC weight disorders (e.g. cystic fibrosis, asthma and emphysema), skin disease (e.g. eczema and psoriasis), kidney disease (e.g. glomerulonephritis), CC lung diseases (e.g. osteoporosis and hypercalcaemia), vascular disorders (e.g. eczema and psoriasis), kidney disease (e.g. glomerulonephritis), CC diseast cancer), reproductive disorders (e.g. infertility and CC miscarriage), eye disorders (e.g. glaucoma and retinal neuropathy). The DNA and its complements may also used as diagnostic probes to detect and CC miscarriage), eye disorders (e.g. glaucoma and retinal neuropathy). The CC antigens in the production of antibodies against the proteins and in CC antigens in the production of antibodies against the proteins and in CC antigens in the production of antibodies against the proteins and in CC antigens in the production of antibodies against the proteins and in CC antigens in the same and activity. Note: This sequence is not given in the control of the protein sequence (AAU09904) and has been created according to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 18; Page; 158pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acids encoding interleukin 17 receptor like polypeptides, useful for preventing, diagnosing and treating, e.g. leukemia, asthma, diabetes.
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Claim 19; Page; 158pp; English

The invention describes novel nucleic acids encoding interleukin (IL) 17 receptor like polypeptides useful as vaccines and in gene therapy. These C have immunomodulatory, anti-inflammatory, anti-diabetic, anti-microbial, immunosuppressive, hepatic, anabolic, anorectic, anti-alrahmer's, renal, C anti-parkinsonian, anti-convulsant, anti-leukaemic, anti-infertility and optical activities. The IL-17 receptor like nucleic acids and C proteins may be used to prevent and treat diseases associated with C inappropriate IL-17 receptor like polypeptide (III/TIP) expression. These c include, for example immune disorders (e.g. inflammation, diabetes and c inappropriate IL-17 receptor like polypeptide (III/TIP) expression. These c include, for example immune disorders (e.g. inflammation, diabetes and c ransplant rejection), infections (e.g. hepatitis and septicaemia), c weight disorders (e.g. anorexia, cachexia and obesity), neuronal c weight disorders (e.g. ystic fibrosis, asthma and emphysema), skin disease (e.g. eczema and psoriasis), kidney disease (e.g. glomerulonephritis), c bone diseases (e.g. osteoporosis and hypercalcaemia), vascular disorders (e.g. stroke and atherosclerosis, cancers (e.g. leukemia, myeloma and c enset cancer), reproductive disorders (e.g. infertility and present and in scarriage), eye disorders (e.g. glamcoma and retinal neuropathy). The DNA and its complements may also used as diagnostic probes to detect and c grantitate the presence of similar nucleic acids in samples and identify patients needing restorative therapy. The IL17th may also be used as antigens in the production of antibodies against the proteins and in c antigens in the production of antibodies against the proteins and in claim in the human Interleukin 17 (IL-17) receptor information diven in claim 19 information given in claim 19

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DB 4

Length 738;

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Best Local Similarity
Matches 737; Conserv 481 481 421 421 361 361 301 301 241 241 181 181 121 121 61 51 ۲ DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQGSRRNYFRSKSGR VCSKGMKYFVDKKNYKHKGGGRGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIAVYF MAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRPKVFL PFKRKTCKQBQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIRA RTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEG EGROCOQLIIKDPKOLNSSFKRTGMESOPFLNMKFETDYFVKVVPFPSIKNESNYHPFFF 180 DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKS DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIBFLKGFRVILEELKS MAPWLQLCSVFFTVNACLNGSQLAVAAGGSGRAWGVDTCGWRGVGPASRNSGLYNITFKY MAPWLQLCSVFFTVNACLNGSQLAVAAGGSGRAWGVDTCGWRGVGPASRNSGLYNITFKY RTRACDLLLQPDNLACKPFWKPRNLNI SQHGSDMQVSFDHAPHNFGXRFFYLHYKLKHEG EGRQCQQLI LKDPKQLNSSFKRTGMESQPFLNMKFETDYFVKVVPFPS I KNESNYHPFFF MAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRPKVFL PFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIRA Conservative ; Score 3941; Di ; Pred. No. 0; 0; Mismatches 1; Indels 0 Gaps 540 480 420 360 300 120 60 480 420 360 300 240 240 180 120 0

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                          The invention describes novel nucleic acids encoding interleukin (II) 17 receptor like polypeptides useful as vaccines and in gene therapy. These have immunomodulatory, anti-inflammatory, anti-diabetic, anti-incrobial, immunosuppressive, hepatic, anabolic, anorectic, anti-alzheimer's, renal, anti-parkinsonian, anti-convulsant, anti-asthmatic, dermatological, osteopathic, vascular, cytostatic, anti-leukaemic, anti-infertility and ophthalmological activities. The II-17 receptor like nucleic acids and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 737; Conserv
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                  FCLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPR
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The invention describes novel nucleic acids encoding interleukin (IL) 17 CC receptor like polypeptides useful as vaccines and in gene therapy. These CC have immunomodulatory, anti-inflammatory, anti-diabetic, anti-microbial, CC immunosuppressive, hepatic, anabolic, anoreccic, anti-alzheimer's, renal, CC osteopathic, vascular, cytostatic, anti-sethmatic, dermatological, CC osteopathic, vascular, cytostatic, anti-leukaemic, anti-infertility and CC proteins may be used to prevent and treat diseases associated with CC inappropriate IL-17 receptor like nucleic acids and CC inappropriate IL-17 receptor like polypeptide (IL1771p) expression. These CC include, for example immune disorders (e.g. inflammation, diabetes and CC weight disorders (e.g. anorexia, cachexia and obesity), neuronal CC weight disorders (e.g. anorexia, cachexia and obesity), neuronal CC dysfunction (e.g. Alzheimer's disease, Parkinson's disease and epilepsy), CC lung disorders (e.g. cystic fibrosis, asthma and emphysema), skin disease (e.g. eczema and psoriasis), kidney disease (e.g. glomerulonephritis), CC bone diseases (e.g. osteoporosis and hypercalcaemia), vascular disorders (e.g. stroke and atherosclerosis, cancers (e.g. infertility and CC breast cancer), reproductive disorders (e.g. infertility and
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28-NOV-2000; 2000US-00724460
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                                                                                                                                                                                                                                                                                                       for preventing, diagnosing psoriasis and glaucoma.
                                                                                                                                                                                                                                                                                                                      Nucleic acids encoding interleukin 17 receptor like polypeptides, useful for preventing, diagnosing and treating, e.g. leukemia, asthma, diabetes
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miscarriage), eye disorders (e.g. glaucoma and retinal neuropathy). The DNA and its complements may also used as diagnostic probes to detect and quantitate the presence of similar nucleic acids in samples and identify patients needing restorative therapy. The IL17rlp may also be used as antigens in the production of antibodies against the proteins and in assays to identify modulators of expression and activity. The anti-IL17rlp antibodies and antagonists may also be used to down regulate expression and activity. Note: This sequence is not given in the specification but is based on the human Interleukin 17 (IL-17) receptor like protein sequence (AAU09904) and has been created according to information given in claim 24
                                                                                                                                                                                                                 SLYVAICNMHQFIDEEPDWFEKQFVPFHPPPLRYREPVLEKFDSGLVLNDVMCKPGPESD
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                        DSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIV
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DSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSC
                                                                                            FXLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention describes novel nucleic acids encoding interleukin (IL) 17 receptor like polypeptides useful as vaccines and in gene therapy. These have immunomodulatory, anti-inflammatory, anti-diabetic, anti-microbial, immunosuppressive, hepatic, anabolic, anorectic, anti-alzheimer's, renal, anti-parkinsonian, anti-convulsant, anti-asthmatic, dermatological, osteopathic, vascular, cytostatic, anti-leukaemic, anti-infertility and
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28-NOV-2000; 2000US-00724460.
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Matches 737
 Cytokine receptor; pulmonary alveolar
                                         Human cytokine
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                                         receptor,
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 Zcytor18; cell proliferation; antipsoriatic; human;
proteinosis; familial periodic fever; antitumour;
                                                                                                                          protein;
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                                         Zcytor18 splice variant.
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Pred. No. 0;
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Query Match
Best Local Sim:
Matches 734;
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                           CYSSKDGQNHMMVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIV
                                                                                        DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKS
CYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIV
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Pred. No. 0;
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The invention relates to a novel isolated SEF (similar expression of genes) nucleic acid molecule (I). An SEF of the invention has cytoste cardiovascular-gen., antiarteriosclerotic, cardiant, vasotropic, hypotensive, and nephrotropic activity, and may have a use in gene therapy. The SEF nucleic acids and polypeptides can be used for diagnostic assays, prognostic assays, and monitoring clinical trials. They can also be used for treating a subject at risk of or susceptible

susceptible to

cytostatic,

FGF

Claim

1,

SEQ ID NO

<u>ب</u>

46pp;

English.

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N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fibroblast growth factor; SEF; similar expression of FGF genes; cytostatic; cardiovascular-gen.; antiarteriosclerotic; cardiant vasotropic; hypotensive; nephrotropic; gene therapy; diagnosis; prognosis; proliferative disorders; cardiovascular disorders;
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Matches 732
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polynucleotide encoding IL-17RLM polypeptide, useful in precomposition for treating e.g., neurological or autoimmune disea as rhoumatoid arthritis or asthma, or kidney- or testis-related
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The invention relates to an isolated cytokine receptor polypeptide designated Zcytor18. The Zcytor18 polypeptides can be expressed by standard recombinant methodology. The polypeptides can be used to cell proliferation associated with psoriasis or tumour growth. The
                                                                                                                                                                  New cytokine receptor polypeptide designated zcytor18, useful for inhibiting cell proliferation associated with psoriasis or tumor growth, and modulating immune system by binding to endogenous zcytor18 ligand.
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RESULT 14 ABB07627 ID ABB07

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Best Local Similarity
Matches 734; Conserv
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PPALPSKILSSGSCKADLGCRSYTDELHAVAP
                                                                                                                                                           QGSRRNYFRSKSGRSLYVAI CNMHQF I DEEPDWFEKQFVPFHPPPLRYREPVLEKFDSGL
                                                                                                                                                                                            WVIQKIHESQFIIVVCSKGMKYFVDKKNYKHKGGGRGSGKGELFLVAVSAIAEKLRQAKQ
                                                                                                                                                                                                                                                        WVIQKIHESQFIIVVCSKGMKYFVDKXXYYKHKGGGRGSGKGELFLVÄVSAIAEKLRQAKQ
                                                                                                                                                                                                                                                                                         PLKGFRVILEELKSEGRQCQQLILKDFKQLNSSFKRTGMESQFFLNMKFETDYFVKVVFF
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                                                             LHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEE
                                                                                                             VLNDVMCKPGPESDFCLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPL
                                                                                                                                              QGSRRNYFRSKSGRSLYVAICNMHQFIDEEPDWFEKQFVPFHPPPLRYREPVLEKFDSGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                      PSIKNESNYHPFFFFTTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PLKGPRVILEELKSEGRQCQQLILKDPKQLNSSPKRTGMESQPFLNMKFETDYFVKVVPF
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                                              LHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEE
                                                                                               VLNDVMCKPGPESDFCLKVEAAVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPL
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97.6%;
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1; Mismatches
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Best Local Similarity
Matches 732; Conser
                                                                                                                                                                                                                                                           The invention relates to an isolated cytokine receptor polypeptide designated Zcytor18. The Zcytor18 polypeptides can be expressed by standard recombinant methodology. The polypeptides can be used to inhibit cell proliferation associated with psoriasis or tumour growth. The encoding nucleic acids are useful for providing Zcytor18 in vivo by gene therapy techniques. Zcytor18 oligonucleotide probes are useful for in vivo diagnosis, and the Zcytor18 probes and primers can be used to detect and localize Zcytor18 gene expression in tissue samples. The probes are also useful for detecting gross aberrations in chromosome 3 in which Zcytor18 gene resides. The Zcytor18 polymucleotides can also be used in linkage-based testing of pulmonary alveolar proteinosis, familial periodic fever and erythroleukemia, and erythroleukemia associated with polymorphisms of cytokine receptors. The present sequence represents a human Zcytor18 variant amino acid sequence
                                                                                                                                                                                                                                   Sequence 753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 94-98; 119pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New cytokine receptor polypeptide designated zcytor18, useful for inhibiting cell proliferation associated with psoriasis or tumor growth, and modulating immune system by binding to endogenous zcytor18 ligand.
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                                                                                                                           MAPWLQLCSVPPTVNACLNGSQLAVAAGGSGRAWGVDTCGWR------
FLKGFRVILEELKSEGRQCQQLILKDFKQLNSSFKRTGMESQPFLNMKFETDYFVKVVPF
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                                                                                                                                                                                                    Protein engineering; cytokine receptor; DNAX cytokine receptor subunit; DCRS; interleukin-17C; IL-17C; psoriasis; inflammatory bowel disorder; interstitial lung disorder; asthma; allergy; atherosclerosis; gastrointestinal-gen; antiinflammatory; antiasthmatic; antiallergic; antipsoriatic; antiarteriosclerotic; respiratory-Gen.; immunosuppressive antiulcer; DCSR9 agonist; DCRS9 antagonist; IL-17C antagonist;
                                                                        Misc-difference
                                                                                                                 Misc-difference
                                                                                                                                                                                                                                                                                                         Human DCSR8 polypeptide.
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                                                                                                                                                                                      agonist; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PPALPSKLLSSGSCKADLGCRSYTDELHAVAP 738
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LKPVHSPWAGPIRAMAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FRFFYLHYKLKHEGPFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PSIKNESNYHPFFFFTTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PPALPSKLLSSGSCKADLGCRSYTDELHAAAP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LKPVHSPWAGPIRAVAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAA
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                              /note=
125
                                                                                                                 Location/Qualifiers
note=
                                                                                    note=
'label= Ser, Gly, Arg or Cys
'note= "encoded by NGC"
                                          label= Lys, Arg, Thr or Met
note= "encoded by ANG"
                                                                                  label= Gln, Arg, Pro or note= "encoded by CNG"
                                                                                                                                                                                                                                                                                                                                                                                                  protein;
                                                                                                                                                                                                                                                                                                                                       entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to modulating (M1) activity of cell, by contacting cell with an agonist or antagonist of DNAX cytokine receptor subunit (DCRS9) or of interleukin (II)-17c where the cell modulates psoriasis, inflammatory bowel disorder (IBD), interstitial lung disorder, asthma or allergy, or atherosclerosis. Also provided are methods for treating (M2) the disorders which involves administration of the modulator and disgnosting (M3) a disorder as mentioned above that involves contacting a sample from a test subject with a binding composition that specifically binds to a polypetide or nucleic acid of DCRS9 or II-17C. (M1) is useful for modulating an activity of a cell. (M2) is useful for treating a subject suffering from a disorder such as psoriasis, IBD, interstitial lung disorder, asthma or allergy, or atherosclerosis, where the interstitial lung disorder is idiopathic pulmonary fibrosis, eosinophilic granuloma, or hypersensitivity pneumonitis. The IBD is Crohn's disease or ulcerative colitis. The present sequence represents a human DCRS8
                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                          Matches 722;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 738 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modulating activity of cell, involves contacting cell with an agonist antagonist of DNAX cytokine receptor subunit.
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N-PSDB; AEB55653.
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                                                                                                                                                                                       121
                                                                                                                                                                                                                                               1 MAPWIQICSVEETVNACINGSQLAVAAGGSGRAWGVDTCGWRGVGPASRNSGLYNITEKY
                 MAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRPKVFL 360
                                                                                                                                                  RTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEG 240
                                                                                                                                                                                                             EGRQCQQLILKOPKQLNSSFKRTGMESQPFLNMKFETDYFVKVVPFPSIKNESNYHPFFF 180
PFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIRA 300
                                                                                                                       EGROXQQLILKDPKQXNGSFKRTGMESQPXLNMKFETDYFVR-LSFSFIKNESNYHPFFF
                                                                                                                                                                                                                                                                                                             MAPWLQLCSVFFTVNACLNGSQLAVAAGGSGRAXGADTCSWXGVGPASRNSGLYNITFKY
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/note= "encoded by NTC"
150
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97.8%;
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Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                       DB 9;
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KADLGCRSYTDELHAVAP 737	KADLGCRSYTDELHAVAP 738	DSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSC 719	DSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSC 720	FCLKVEAAVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPR 659	FCLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPR 660	SLYVAICNMHQFIDEEPDWFEKQFVPFHPPPLRYREPVLEKFDSGLVLNDVMCKPGPESD 599	SLYVAICNMHQFIDEEPDWFEKQFVPFHPPPLRYREPVLEKFDSGLVLNDVMCKPGPESD 600	DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQGSRRNYFRSKSGR 539	DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQGSRRNYFRSKSGR 540	VCSKGMKYFYDKKNYKHKGGGRGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIAVYF 479	VCSKGMKYFVDKKNYKHKGGGRGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIAVYF 480	CYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIV 419	CYSSKDGQNHMNVVQCFAYFLQDFCGCBVALDLWBDFSLCRBGQRBWVIQKIHBSQFIIV 420

Search completed: March 1, 2006, 10:26:10 Job time: 94 secs

GenCore version 5.1.7 Copyright (c) 1993 - 2006 Biocceleration Ltd.

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Result
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Maximum DB :
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Listing first 45 summaries
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Perfect score:
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   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                  108
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3948
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Match
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Gapop 10.0 , Gapext 0.5
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1: pir1:*
2: pir2:*
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protein kinase - m
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protein kinase B-r
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Bassoon protein -
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hypothetical protein DKFZp434N1928.1 - human (fragment)
C;Species: Homo sapiens (man)
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. 90	2	98	98	. 98	98.5	98.5	99	99.5	99.5	99.5	100	100	100.5	100.5	101	101
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A37733	20160	A88860	T27633	T27632	T25715	T33782	S33794	T24490	T05533	859069	853611	JC6093	AD2381	A47485	A38985	A84668
brocern_cline v	prototal transfer is	protein ZC518.3 (i	hypothetical prote	hypothetical prote	hypothetical prote	<ul> <li>hypothetical prote</li> </ul>	hypothetical prote	hypothetical prote	hypothetical prote	Z13 protein - mous	MIBP1 protein - ra	dead ringer nuclea	type I site-specif	ABR protein 1 - hu	nucleotide exchang	Argonaute (AGO1)-1

## ALIGNMENTS

Cibic: 11.3m:2000 #sequence_revision 11-Jan-2000 #text_change 09-Jul-2004 Ciccsion: 74385   R;Bloccker, H; Boccher, M; Brandt, P; Meeves, H, W; Gassenhuber, J; Wiemann, S. submitted to the Procein Sequence Database, November 1999   A;Reference number: Z22230   A;Reference number: Z22230   A;Reference: University   A;References: University   A;											1
_change 09-Jul-2004  BBenhuber, J.; Wiemann,  9  ngth 564;  ndels 0; Gaps 0;  FDHAPHNFGFRFFYLHYK 235  FDHAPHNFGFRFFYLHYK 60  TTRKVMHYALKPVHSPWA 295  FILLI	Ş	D Q	Db Qy	B &	р <i>Q</i>	Db Qy	D Qy	р <b>У</b>	Query Best I Matche	A;Status A;Molecu A;Residu A;Cross A;Experi C;Geneti A;Note:	C;Date: C;Access R;Bloeck submitte A;Referc
	GPESDFCLKVEAFVLGATGPADSQHBSQHGGLDQDGEARPALDGSAALQPLLHTVKAGSP	SKSGRSLYVAICNMHQFIDEEPDWFEKQFVPFHPPPLRYREPVLEKFDSGLVLNDVMCKP 	IAVYFDYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEPGQHTRQGSRRNYFR	QFIIVVCSKGMKYFVDKKNYKHKGGGRGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKF	PKVFLCYSSKDGQNHANVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHES	GDIRAMAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPR      :	LKHEGPFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWA 	HPFFFRTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGFRFFYLHYK 	atch 75.8%; Score 2993; DB 2; Length 564; cal Similarity 99.5%; Pred. No. 4.3e-231; 560; Conservative 1; Mismatches 2; Indels 0; Gaps	2	#sequence_revision 11-Jan-2000 #text_change 09-Ju1-2004 cher, M.; Brandt, P.; Mewes, H.W.; Gassenhuber, J.; Wiemann, otein Sequence Database, November 1999 Z22230

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C; Superfam:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
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                  576
                                                                                                                           592
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                  EPVLEKF-----
                                                       SRKLNYIESDPQWFENTHHRVATRRVSELEAHNIVPL-
                                                                                                                           TNPKYVFFPINRLLQYSIP---NSLMTMTTALTEQPARPEQLAGFNQVFAR----LQAAI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QYACHDQVAVTILWSPGALGIEFLKGFRVILEELKSEGRQCQQLILKDPKQLNSSFKRTG
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                                                                                        CNMHQFIDEEPDWFEK-----
                                                                                                                                                                                                                                  GRGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIAVYFDYSCEGDV--PGILDLSTKY
                                                                                                                                                                                                                                                                     LRDVFNLNVHLDVWDEDDI-EENRAEYINSSIVRANKVIIINSIG-AYF--RTVFRHQR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                            -RLMD-NLPQLCSHLHSRDHGLQEPGQHTRQGSRRNYFRSKSGRSLYVAI
                                                                                                                                                                                                 ----EPAIERITTGRND--
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.3%; Score 169.5; DB 2;
21.4%; Pred. No. 4.7e-05;
62: Mismatches 225;
-DSGLVLNDVMCKPGPESDFCLKVEAPVLGATGPADSQHES
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                                                                                        -QFVPFHPPPLRYR-----
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                                                     PPSLEVKVEDEDAFGQMETLPI
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            R;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, Nucleic Acids Res. 28, 4317-4331, 2000
A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodus A;Reference number: A83650; MUID:20512582; PMID:11058132
A;Accession: F83781
A;Status: preliminary
                                                                                                                       transposase (08) / ABC transporter (ATP-binding protein) BH1054 [imported] - C;Species: Bacillus halodurans C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 09-Jul-2004 C;Accession: P83781
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A;Gene: CESP:F56D1.2
A;Introns: 93/1; 121,
C;Superfamily: Caeno
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C;Genetics:
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T30113
Typothetical protein F56D1.2 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #t.
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A; Residues: 1-718 < CHI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          349 RERLRPRP-----KVFLCYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          h 3.1%; Score 124;
Similarity 21.1%; Pred. No. 0.
82; Conservative 63; Mismatche
                                                                                                               LDQDGEARPALDGSAALQPLLHTVKAGSPSDM--PRDSGIYDSSVPSSELSLPLMEGLST
                                                                                                                                                                                          FHPPPLRYREPVLEKFDSGLVLNDVMCKPGPESDFCLKVEAPVLGATGPADSQHESQHGG
                                                                                                                                                                                                                                                                                                             --IRDATHNEPEARKKYAVVRENYS--PHVPPNLAILNLPT-FILPEQEAQLTAFLHNVE
SESDSSSESESESDNEG---EDPKTIVVK
                                DQTETSSLTESVSSSSGLGEEEPPALPSK 713
                                                                                                                                                                                                                                H------TERANVTQNISBAQIHEWNLCASRMMSFFVRNPNWLETRWKPKDELAA
                                                                                                                                                                                                                                                                     HGLQEPGQHTRQGSRRNYFRSKSGRSLY---VAICNMHQFIDEEPDWFEKQFVP-----
                                                                                                                                                                                                                                                                                                                                                EKLRQAKQSSSAALSKFIAVYFDYSCEGDVP---GILDLSTKYRLMDNLPQLCSHLHSRD
                                                                                                                                                                                                                                                                                                                                                                                        AEQIVPSRWLVDQISSLKKFIIVVSDCAEKILDTEASETHQLVQARPFADLFGPAMEMI-
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                                                                                                                                                   LH---LKRQSPVIVPIQT------EED---RIAASIKYNLVPPQALVDSD---
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R;Sanchez-Alonso, P.; Guzman, P.
Genetics 148, 1043-1054, 1998
A;Tille: Organization of chromosome ends in Ustilago may
A;Reference number: Z16557; MUID:98198830; PMID:9539423
A;Accession: T09081
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-757 <SAN>
A;Cross-references: UNIPROT:013399; UNIPARC:UPI000006BCA
A;Experimental source: strain FB2
C;Genetics:
A;Gene: UTASrecQ
C;Keywords: DNA binding
                                                                                                                                                                                                                                             telomere-associated recQ-like helicase - smut fungus (Ustilago maydis) (fragment) C;Species: Ustilago maydis (corn smut) C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004 C;Accession: T09081
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   Query Match
Best Local
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   Similarity
                                                                                                                                                                                                                                                                                                                                                                  DRVHTFSGGMKRRLNIAVALLHEPELIIMDEP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MFIEKGEMVGLLGPNGAGKSTTISMISSLIQPTSGDVLIKGGSIHKQSKAIRSILGVVPQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QCF---AYFLQDFCGCEVALDLWEDFSLCREGQREWV----IQKIHESQFIIVVCSKGMK 427
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RCFWDSPFFIKSDGKQYASFALFD--KLRREGGENMIEVIDLSKTYRNRQVV----KGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.9%;
ilarity 19.8%;
Conservative 7
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 2.9%;
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   Score
Pred.
                                                                                                        UNIPARC: UPI000006BCA3; EMBL: AF030885; NID: g2642221;
   114; DB
No. 1.1;
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                                            A; Molecule type: DNA
A; Residues: 1-2946 <
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                                                                        A; Status: preliminary
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A;Status: translated from GB/EMBL/DDBJ

A;Molecule type: DNA
A;Residues: 1-2946 <ROU>
A;Cross-references: UNIPROT:O64634; UNIPARC:UPI00000AA3F8; EMBL:AC003680; NID:g2979540; I
A;Cross-references: UNIPROT:O64634; UNIPARC:UPI00000AA3F8; EMBL:AC003680; NID:g2979540; I
A;Experimental source: cultivar Columbia
R;Lih, X.; Kaul; S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.; N
M; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, L.:
euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, J.
Nature 402, 761-768, 1999
A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana.
A,Reference number: A84420; MUID:20083487; pMID:10617197
A,Accession: G84891
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NyAlternate names: hypothetical protein F17K2.7

NyAlternate names: hypothetical protein F17K2.7

CySpecies: Arabidopsis thaliana (mouse-ear cress)

CyDate: 12-Feb-1999 #sequence_revision 12-Feb-1999 #text_change 09-Jul-2004

CyAccession: T00867; G84891

R;Rounsley, S.D.; Kaul, S.; Lin, X.; Ketchum, K.A.; Crosby, M.L.; Brandon, R.C.;

submitted to the EMBL Data Library, March 1998

A;Description: Arabidopsis thaliana chromosome II BAC F17K2 genomic sequence.

A;Reference number: Z14207
A;Residues: 1-2946 <STO>
A;Cross-references: UNIPARC:UPI00000AA3F8; GB:AE002093; NID:g2979554; PIDN:AAC06163.1;
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254 ETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPI----RAMAITVPL-- 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPSDMPRDSGIYDSSVPSSE-LSLPLMEGLSTDQTETSSLTESVSSS----SGLGEEEPPA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----NGQRD------RIIVYCTS--KELVARLAEMLGCAAYSSESGSEADKAAIIQ 290
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RESULT 7
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GTPage-activating protein rapIGAP
C;Species: Homo mapiens (man)
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A;Introns: 652/1; 913/3; 1165/3; 1210/3; 1245/3; 1283/3; 1309/2; 1336/3; 1438/3; 1638/2
; 2449/2; 2481/3; 2643/1; 2890/3; 2931/3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               158 DYFVKVVPFPSIKNESNYHPFPF-------RTRACDLLLQ--PDNLACKPF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440 -EGTAHMPRLFSFLSADNOGIEAYFHA-------QFL----QFL-----VVESGSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 DNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 APWLQLCSVFFTVNACLNGSQLAVAAGG-SGRAWGVDTCGWRGVGPASRNSGLYNITFKY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  h 2.9%; Score 114; DB 2; Length 2946; Similarity 18.8%; Pred. No. 8.3; 62; Conservative 105; Mismatches 315; Indels 282;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIVVCSKGMK------YF
                                                                                                               VGIIRLIGALISSGHLTFDFDARS
                                                                                                                                                                                                                      SDMPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGE----EEPPA--
                                                                                                                                                                                                                                                                                  PESDFCLKVEAPVLGATG-PADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSP
                                                                                                                                                                                                                                                                                                                            SGKR-----SSTDPSEKS--PYN----ESGSVKQLDSNPHDNEIGFDLPG
                                                                                                                                                                                                                                                                                                                                                                  SGRSLYVAICNMHQFIDEEPDWFEKQFVPFHPPPLRYREPVLEKFDSGLVLNDV-MCKPG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ISEKDSETTFPLDGNTROMGELNALIDELLVIIELLMGAASPSLAADDLRRLLGFIIDSP
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                                                                                                                                               ----LPSKLLSSGSCKADLGCRS
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C;Date: 24-Jan-1992 #sequence_revision 24-Jan-1992 #text_change 05-Oct-2004 C;Accession: A39897 R;Rubinfeld, B:; Munemitsu, S:; Clark, R.; Conroy, L.; Watt, K.; Crosier, W.J.; McCormiclel 65, 1033-1042, 1991 Protein 65, 1033-1042, 1991 Protein 65, 1033-1042, 1991 Protein 65, 1033-1042, 1991 Protein 67, Protein 67, Protecular cloning of a GTPase activating protein specific for the Krev-1 protein 67, Reference number: A39897; MUID:91256304; PMID:1904317 Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protein 67, Protei
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A; Residues: 1-663 < RUB>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          236 L----KHEGPFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVH 291
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                                                                                                                                                                                                                                                                                                                                            RPALDGSAALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELS-----LPLMEGLSTDQTE 688
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                                                                   LSSGSCKADLGC 726
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EASEQHMPQLGC
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663
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                                                                                                                                                                                                      -LTESVSSSSG------LGEEEPPALPSKL
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EMBL: AL031135

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C;Species: Rattus norvegicus (Norway rat)
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_chang
C;Accession: T13960
R;Mori, M.; Nishikawa, T.; Higuchi, K.; Nishimura, M.
submitted to the EMBL Data Library, November 1998
A;Description: Deletion in the beige gene of the beige rat due
A;Reference number: Z17837
A;Accession: T13960
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Accule type: mRNA
A;Residues: 1-3788 <MOR>
A;Cross-references: UNIPROT:09Z2X9; UNIPARC:UPI00000E5B7B; EMB.
C;Gennetics:
C;Gennetics:
A;Gene: beige
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Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 146;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                         1127
                                                                                                                                                                                                                                                                                                                                                                                                  1022
                                             1241 GSIVPNNLLESLTHG 1255
                                                                                                                                                                                                                                                                                                           1082 KTFMNQESETCLQSIRLLESLLAICLHSARASQQKMELELPSQ-------SL
                                                                                                                                                                                                                                                                                                                                                       498
                                                                                                                                                                                                                                                                                                                                                                                                                                            451
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     346 ALPRERLRPRPKVFLCYSSKDGQNHMNVV----QCFAYFLQDFCGCEVALDLWEDFSLCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 808 YLDGIRSHSLKAFETLIVSLGEQQKRAAVPGV---DGLDIQQELSSLSV--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132 DPKQLNSSFKRTGMESQPFLNMKFET-DYFVKVVP------PPSIKN-----ESN 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          706 LHNTQIASHICNLIQKGNVIVQW----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      78 AQNITISQYACH--DQVAVTILWSPGALGIEFLKGFRVILEELKSEG----RQCQQLILK 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 GSQLAVAAGGSGRAWGVDTCGWR--GVGPASRNSGLYNITFKYDNCTTYLNPVGKHVIAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           h 2.8%; Score 112.5;
Similarity 19.9%; Pred. No. 16;
                                                                                       AALQP--LLHTVKAG 653
                                                                                                                                  EVLSQPG----DFSEEAEDSQCCSLKLLGEEEGYEADSESNPEDGETQDDGVELPEAEGFS
                                                                                                                                                                         DVMCKPGPESDFCLKVE-----APVLGATG--PADSQHESQHGGLDQDGEARPALDG-S
                                                                                                                                                                                                                         SLENILCELRDHLSQSKVAETELAKPLFDALLRVALGNHSADLDPGDTVTEKSHPS----B
                                                                                                                                                                                                                                                                     SLYVAICNMHQFIDEEP----
                                                                                                                                                                                                                                                                                                                                                                                                GLMRISQPEMILKEDVSSSTÄPEPGFLKKSADRVSELESQHMLPTSAEQILATKSIPGEA 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                            -LVAVSAIAEKTRQAKQSSSAALSKFIAVYFDYSCEGDVPGILD-----LSTK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----WIYMLNSVFQKQFHRLGGFQVCHE-LIFMIIQKLFRSHTEDQGRRQGEMSVNKNQ 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EGQREWV--IQKIHESQFI----IVVCSKGMKYFVDKKNYKHKGGGRGSGKGELF----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEPLSHMLPRLSL-----ENVVLPSPECLHH-----AADIW---SMCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KPVHSPWAGPIRAMAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTY--TA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RFFYLHYKLKHEGPFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----TSAQTHMSSQLKQYLPQEVLQIYLKTLPILLKSRVIRDLFLSCNGVNHIIELN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GETLQGTLCGAGPSCGLPSPSYRPQGILP---SSGSEDFLWKWDALEAYQNFIFQE--DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                     ----YRLMDNLPQLCSH---LHSRDHGLQEPGQHTRQGSRRNYFRSKSGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -DAHINTINLFLCVAF-----LCVSKEADSDRESAN-ESEDTSGYDSTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -GPSLHK----QQASTDSPCSLRK----FYASLRDTDPKKRKTVHQ--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98; Mismatches
                                                                                                                                                                                                                                                                  -----DWFEKQFVPFHPPPLRYREPVLEKFDSGLVLN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----KLYNYIFNPVLQRGVELVHHCQQLSI-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
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C,Superfamily: Arabidopsis thaliana hypothetical protein F8D20.70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Map position: 4
A; Introns: 13/3; 58/2; 93/1; 274/3; 340/3; 373/3; 395/1; 437/3; 536/1; 624/2; 665/3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: UNIPROT:O81789; UNIPARC:UPI00000A12E3; A;Experimental source: cultivar Columbia; BAC clone P8D20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-917 <BEV>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Reference number: Z15381
A; Accession: T04661
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49 R-----NSGLYNITFKYDNCTTYLNPVGKHV---IADAONI--TISOYACHDOVAVTIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19 NGSQLAVA-AGGSGRAWGVDTCG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                         -----VMCRKKQQENIYSHLDEESSESSTYTAALPRERLRPRPKVFLCYSSKDGQNHMN
  QFVPF-
                                      ----KGMKYFVDKKNYKHKG------GGRGSGKGELFLVAVSAIAE-----KLRQAKQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IPFQGSLKKGNNHIVQSVKYIKLTGSITCIQKSQNSKHLAIGSDQGHDSLVEVID-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PILVLFLKEQIDQDVSSRGNAALTALHYDSNSRLLVSGDHNGMVRLYRFKPEPYLTENSF 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KFETDY----FVKVVPFPSIKNESN---YHPFF-----FRTRACDLLLQPDNLACK-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GKSGRVYAYDDYMIEKYLIQSQSKSSPSLPKETVVKLPFSDSSSITVGKFLTNPSHLLNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NGSRVSVGYSNGDILIWSIPSKGECSPESSAMICKLNLGYKSEKIPIASLKWVYAEGKAS
                                                                                    SHLHSRDHGLQEPGQHTRQGSRR-----NYFRSKSGRSLYVAICNMHQFIDEEPDWFBK
                                                                                                                                TSIRGFTYSSPKPNSLPEITISASWDGDLVMVNGDDELIVSSVLPQKETFRLVESM----
                                                                                                                                                                           S-----VPGILDLSTKYRLMDNLPQLC
                                                                                                                                                                                                                         AHVVQGVKKVLHKKKFSSSPICSASTFYGTSGVG---LTLVFTDGTVEIRSLPELSQLKQ
                                                                                                                                                                                                                                                                                                                                                       VVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIVVCS-----
                                                                                                                                                                                                                                                                                                                                                                                                QGFEKNVLVVAMRDSSVFA-LDSDTGNMIGTNMIKPK----KPFKVLYMQILDGK----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RKVMHYALKPVHSPWAGPIRAMAITVPLVVISAFATLFT----------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SDE-DYAQLAKDAVPFLPFHTVPKESSRSAHFPGFTKVKNVYITGHCDGTISVWDMTCSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RVYVIGSSSNSLQVVLLNEQTETRMIKLGLHVSEPCADMEMIIADVNEQSKHKQDFLFVL
                                                                                                                                                                                                                                                                                                           ------ODTSG-----NGFDTSRES----TVEEISIRQPSVLVCSEKAIYIYSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---EGPFKR-----KTCKQEQTTETTSCLLQNVSP------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----PFWKPR-NLNISQHG------SDMQVSFDHAPHNFGFRFFYLHYKLKH--
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.8%; Score 110;
17.9%; Pred. No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----LQVSLVDIEEANVLYTKHIASDICPGIISLQFESCIV
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  -HPPPLRYREPVLEKFDSGL----
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-GDYIIELVDDTNTT

238 330 271 153 211 97 151 48 40

445

508

690

750

466

577 423 538 372 488

634

RESULT 11 T30851 T30851 Lysosomal trafficking regulator, long splice form - mouse N;Alternate names: beige protein homolog C;Species: Mus musculus (house mouse) C;Date: 22-Oct-1999 #sequence_revision 22-Oct-1999 #text_change 09-Jul-2004 C;Accession: T30851	Qy 660 RDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSK 713  Db 3761 AAPGPQQSQPPSSRQTPSGTASRQPQTQQQQQQQQQQQQGLGQQAPQQAPSQ 3811	Qy 611GATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMP 659	Qy 589 NDVMCK	Qy 557 PDWPEK	Qy 502 DNLPQLCSHLHSRDHGLQBPGQHTRQGSRRNYFRSKSGRSLYVAICNMHQFIDEB 556	Query Match 2.8%; Score 109.5; DB 2; Length 3942; Best Local Similarity 19.0%; Pred. No. 29; Matches 56; Conservative 28; Mismatches 111; Indels 99; Gaps 9;		;Map position: 9F1; ;Introns: 72/2; 208/3;;Note: bassoon	A;Residues: 1-3942 <die> A;Residues: 1-3942 <die> A;Cross-references: UNIPROT:O88737; UNIPARC:UPI0000029B58; EMBL:Y17034; NID:g3413809; A;Experimental source: strain 129 SVJ C:Genetics:</die></die>	novel zinc-inger cas/sutramine-repeat procein selectively locali Z22249; MUID:98345363; PMID:9679147 ;; translated from GB/EMBL/DDBJ	es: Mus musculus (house mouse) 11-Jan-2000 #text_change 09-Jul-2004 11-Jan-2000 #sequence_revision 11-Jan-2000 #text_change 09-Jul-2004 sion: T42730 , S.; Sanmarti-Vila, L.; Langnaese, K.; Richter, K.; Kindler, S.; Soyke, A.; V. Biol. 142, 499-509, 1998	RESULT 10 T42730 Fassoon protein - mouse	Qy 694 ESVSSSS 700 :    :: Db 895 KSFSSTA 901	Qy 634 RPALDGSAALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLT 693 :   :  :  :  :  :  :  :  :  :  :  :  :	Qy 587 VINDVMCKPGPESDFCLKVEAPVLGATGPADSQHESQHGGLDQDGEA 633	Db 751 ANFPWNNNVENSREINTITRVEDEEELDIDDIDIDDHHPNQQQQEKPKEQGILSGLSKQK 810
୪ ଜ ୪ ଜ	S B	ð B	Q D	Q B	Q Db	δ B	Cte Db	Qy Db	Qy Db	Qy Db	ex, oy oy	Query Best I Matche		A,Resid A,Cross A,Exper C;Genet	A;Refere A;Access A;Status A;Molecu	R;Barbos submitte A:Descri

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osa, M.D.F.S.; Tchernev, V.T.; Kingsmore, S.F.
ted to the EMBL Data Library, September 1996
ription: Two bg or not two bg? Longest isoform of mouse Lyst (beige) generence number: Z20903
ssion: T30851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          us: preliminary; translated from GB/EMBL/DDBJ
cule type: mRNA
dues: 1-3788 <BAR>
s-references: UNIPROT:p97412; UNIPARC:UPI0000028F2F; EMBL:U70015; NID:g1813541; PII
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2.8%; Score 109; DB 2; Length 3788;
Local Similarity 19.8%; Pred. No. 30;
hes 157; Conservative 104; Mismatches 282; Indels 250;
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                                                                                                                                            1161 ---ALGNHSADLGPGDAVTEKSHPSEEELLSOPGDFSEEAEDSOCCSLKLLGEEEGYEAD 1217
                                                                                                                                                                                                                                                                                             1105 ----ICLHSARACQQKMELELPSQGLSVENILCELREHLSQSKVAETELAKPLFDALLRV 1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1061 QPVLPTSAEQIVATE---SVPGE------RKAFMSQQSETSLQSIRLLESLLD----- 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1024 IRIS-----------YPELTLKGDVSSATAPDLGFLRKSADSVRGFQS 1060
1218 SESNPEDVDTQDDGV---ELN-PEAEGFS-GSIVSNNLLENLTH----GEIIYPEICMLG 1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            504 --- LPQLCSHLHSRDHGLQEPGQHTRQGSRRNYFRSKSGRSLYVAICNMHQFIDEEPDWF 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    452 VAVSAIAEKLRQAKQSSSAALSKFIAVYFDYSCEGDVPGIL--DLSTKYRLMDN-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           968 ---WIYMLNSVFQKQFHRLGGFQVCHE-LIFMIIQKLFRSHTEDQGRRQGEMSRNENQEL 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              348 PRERLRPRPKVFLCYSSKDGQNHMNVV----QCFAYFLQDFCGCEVALDLWEDFSLCREG 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                890 QDVH-----INTINLFLCVAF-----LCVSKEADS----DRESANESEDTSGY 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              808 YLDGIRSHSLKAFETLIVSLGEQQKDAAVLDV---DGLDIQQBLPSLSV------
                                                                                                                                                                                                                       606 EAPVLG----ATGPADS-----QHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSD 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     404 QREWV--IQKIHESQFI----IVVCSKGMKYFVDKKNYKHKGGGRGSGKGELF-----L 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               929 DSPPSEPLSHMLPCLSLED-----VVLPSPECLHH------AADIW---SMCR-- 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          288 KPVHSPWAGPIRAMAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSTYTAAL 347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   228 RFFYLHYKLKHEGPFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKVWHYAL 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       706 LHNIQIANHICNILQKGNVVVQW------KLYNYIFNPVLQRGVELVHHCQQLSIP 755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            651 GETLQGTLCGAGPTSGLPSPSYREQGILP---SGGSEDLLWKWDALEAYQSFVFQB--DR 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     854 ----FYASLREPDPKKRKTIH---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      756 S-----AQTHMCSQLKQYLPQSVLQIYLKTLPVLLKSRVIRDLPLSCNGVNHIIELN 807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             132 DPKQLNSSFKRTGMESQPFLNMKFET-DYFVKVVP-----FPSIKN-----ESN 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     78 AQNITISQYACH--DQVAVTILWSPGALGIEFLKGFRVILEELKSEG----RQCQQLILK 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 GSQLAVAAGGSGRAWGVDTCGWR--GVGPASRNSGLYNITFKYDNCTTYLNPVGKHVIAD 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y-----HPF-FFRTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFDHAPHNFGF 227
                                                                  M---PRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSGLGE---EEPPALP 711
                                                                                                                                                                                                                                                                                                                                                                           EKOFVPFHPPPLRYREPVLEKFDSGLVLNDVMCK------PGPESDFCLKV 605
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712 SKLLSSGSCKADL 724

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A;Status: preliminary; translated from GB/EMBL/DDBJA;Molecule type: mRNAA;Residues: 1-592 <RES>
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R;Tellam, J.T.; McIntosh, S.; James, D.E.

J. Biol. Chem. 270, 5857-5863, 1995

A;Title: Molecular identification of two novel Munc-18 isoforms

A;Reference number: 149238; MUID:95197608; PMID:7890715
                                     ঠ
                                                                                                                                                                                   A;Gene: munc-18c
C;Superfamily: vacuolar protein sorting protein VPS45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        vesicle transport protein - mouse
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A;Residues: 1-488;489-535 <POU>
A;Residues: 1-488;489-535 <POU>
A;Cross-references: UNIPROT:Q9NTU6; UNIPARC:UPI000017C18F; UNIPARC:UPI000017C190; EMBL:
A;Experimental source: adult testis; clone DKFZp434P211
A;Note: the cDNA sequence contains a -1 frameshift near codon 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Poustka, A.; Klein, M.; Mewes, H.W.; Gassenhuber, J.; Wiemann, S. submitted to the Protein Sequence Database, September 1999 A;Reference number: Z18723
  밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Status: preliminary
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                                                                                            Query Match
Best Local Similarity
Matches 93; Conserv
                                                                                                                                                                                                                                                                 Cross-references: UNIPROT:Q60770; UNIPARC:UPI00000284B1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 05-Oct-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Species: Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
;Accession: T17212
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                662
                                               307 LVVISAPATLFTVMCRKKQQ------ENIYSHLDEESSESSTYTAALPRERLRPRPK 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        163 AVSSGHTQCEKAADIAPGQTLT--LRNDSSTSEASRP-----STHKF----PLLPRRRG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    103 RYNOTSOTSWTSSCTNRNAISSSYSSTGGLPGLKRRRGPASSHCQLTLSSSKTVSEDRPQ 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    460 KLROAKOSS-SAALSKFIAVYFDYSCEGDVPGI------LDLSTKYRLMDNLPQ
34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SG-IYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSSG 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGASGLPAVSKAPS----MDAQQETHKSQDCLGLLDPLASA--AGVPSTAPMSGKKHRP 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VLGATG-PADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMP-----RD 661
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IMLLDEFTTKLLSSCCKMTDLLEEGITVIENIYKNREPVRQMKALYF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PGPLFSSSDP-----LPATSSDSQDSAQVTSLI-----
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                                                                                                                2.7%;
18.5%;
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23.5%; Pred. No. 2;
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                                                                                              64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42; Mismatches 108;
                                                                                         Score 108; DB 2; Length 592
Pred. No. 2.3;
4; Mismatches 157; Indels :
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                                                                                              Indels 188;
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86
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                                                                                              22;
                                                                                                                                                                                                                                                                                                                                    A;Cross-references: C;Genetics:
C;Gene: F1504.27
A;Map position: 1
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Nature 408, 816-820, 2000

A; Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, B.; Kim, C.; C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Lucos, J.S.; Maiti, R.; Marziali, Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A; Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, I ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A; Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A; Accession: D86477
A; Accession: D86477
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A; Residues: 1-638 <STO>
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Best Local S
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  197
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                                                                                                                                                                                        80 NITISQYACHDQVAVTILWSPGALGIEFLKGFRVILEELKSEGRQCQQLILKDPKQLNSS 139
                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                              DIKYGQYSCHLQDCFYVVHS-------KCATHENVWDGKELEWEIESDETEDISP 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NLAEDCMNKFKLNIEKLCKTEQDLALGTDAEGQRVKDSMLVLLPVLL--NKNHDNCDKIR 406
KPFWKPRNLNISQHG--SDMQVSFDHAPHNFGFRFFYLHYKLKHEGP--FKRKTCKQEQT 252
                                                                                              FKRTGMESQPFLNMKFETDYFVKVVPFP---SIKNESNYHPFFFRTRACDLLLQPDNLAC 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPRD-SGIY 665
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----FVDKK---NYK--HKGGGRGSGKGELFLV----AVSAIAEKLRQAKQSSSAALS
                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                              2.7%; Score 106.5;
19.4%; Pred. No. 3.4
                                               DGFIKHFCHKHRLKLKNHDGARDTEKQCRAC---IYP--IVS 364
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Y 253 TETTSCLLQNVSPGDYIIELVDDTNTTRKVMHYALKPVHSPWAGPIRAMAITVPLVVISA 312
y 313 FATLPTVMCRKKQQENIYSHLDEESSE-SSTYTAA-LPRERLRPRPKVFLCYSSKDG 367 ; : :: : ::       :  :
y 368 QNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCREGQREWVIQKIHESQFIIVVCSKGMK 427 b 517NTYWCEVCEKQLDFKEWFYTCNKCCITIHLHCIFGSS 553
Y 428 YFYDKKNYKHKGGGRGSGKGELFLVAVSATAEKLRQAKQSSSAALSKFIAVYFDYSCEGD 487
RDHGLQEPGQHTRQGSRRNYF
571 VFRNNSNTRQLCYMCHNRCTGLIFYEGYRRNATYYYNHSNRSTHRM 616
y 545 AICNM 549
visiae) _change 05-Oct-200
;De Antoni, A.; D Angelo, M.; Dal Pero, F.; Sartorello, F.; Pandolfo, D.; Lanfranchi, G ubmitted to the Protein Sequence Database, April 1996 ;Reference number: 863047 ;Recession: 863059 ;Molecule type: DNA
CTOBE-references: UNIPROT:P53550; UNIPARC:UPI000000056F; EMBL:Z71394; NID:g1302044; PI; CTOBE-references: UNIPROT:P53550; UNIPARC:UPI000000056F; EMBL:Z71394; NID:g1302044; PI; CTOBE-references: UNIPROT:P53550; UNIPARC:UPI0000000056F; EMBL:Z71394; NID:g1302044; PI; CTOBE-references: UNIPROT:P53550; UNIPARC:UPI0000000056F; EMBL:Z71394; NID:g1302044; PI; CTOBE-references:UNIPROT:P53550; UNIPARC:UPI0000000056F; EMBL:Z71394; NID:g1302044; PI; CTOBE-references:UNIPROT:P53550; UNIPARC:UPI00000000056F; EMBL:Z71394; NID:g1302044; PI; CTOBE-references:UNIPROT:P53550; UNIPARC:UPI00000000056F; EMBL:Z71394; NID:g1302044; PI; CTOBE-references:UPI000000000000000000000000000000000000
ubmitted to the EMBL Data Library, June 1995 ;Description: Suppressor of a yeast pet mutant. ;Reference number: S59701 ;Accession: S59701
, MOLECULE TYPE: DNA ;Residues: 1-424,'L',426-970 <tza> ;Cross-references: UNIPARC:UPI0000168DB7; EMBL:L43065; NID:g870733; PID:g870734 ;Experimental source: strain D273-10B</tza>
;Molecule type: DNA ;Residues: 1-970 <dan> ;Cross_references: UNIPARC:UPI00000056F; EMBL:Z69382; NID:g1183941; PID:e221828; PID:g</dan>
118c
Query Match 2.7%; Score 105.5; DB 2; Length 970; Best Local Similarity 19.7%; Pred. No. 7.6; Mismatches 171; Indels 213; Gaps 30;
y 260 LQNVSPGDYIIELVDTWTTRKVMHYALKPVHSPWAGPIRAMAITVP 306  :  :  :

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                                                                                                                    359 QLFATMNGQPFAPFFFMLPLTNNSNSANPIPTFVPPNFNAPPNPMAFGVPNMHN----- 412
                                                                                                                                                 586 ---LVLNDVMCKPGP-----ESDFCLKVEAPV----LGATGPADSQHESQHGGLDQDG 631
                                                                                                                                                                             314 QKDQQSSFSSQQQPSIFPSL-----SEPFANNKNVI---PPTM----PMANVEMSNP 358
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                                                                                                                                                                                                                                                                                                                          458 ----AEKLR--QAKQSSSAALSKFJAVYFDYS-------CEGD 487
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                                                                                                                                                                                                                                                                                                                                                        -----YIDDNQFI-----ERNIQGKNYK------IFLISGVSEVENFKPQ 194
                                                             ----LSGPAVSQPF----SLPPAPLPRDSG-YSSSSPGQLL------D 445
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Q60xb5
Q9nrm6
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Q8r5j8
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ITVPLVV	KRKTCKQI	RACDLLL 	RQCQQLII	CTTYLNP	PWTOTCS.	Similarity 3; Conserv	SEQUENCE DEC-2001 067; AAM 067; AAM 020; C:m 020; F:t 988; F:t 984; P:i PR000157 739 AA;	9606;	(Huma letazoa ltheria	(TrEMBLrel. (TrEMBLrel. (TrEMBLrel.	_		
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01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Interleukin 17 receptor-like protein long form.
Name=IL17RD; Synonyms=IL17RLM;
Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Xiong S., Zhao Q., Rong Z., Huang G., Huang Y., Chen P.,
Liu L., Chang Z.;
"hSef inhibits PC-12 cell differentiation by interfering
mitogen-activated protein kinase MAPK signaling.";
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PubMed=12958313; DOI=10.1074/jbc.M306936200;
Xiong S., Zhao Q., Rong Z., Huang G., Huang Y.,
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Q58EZ7 HUMAN 1
Q58EZ7;
     MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
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Mammalia; Eutheria;
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Submitted (OCT-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC038369; AAH38359.1; -; mENA.
SEQUENCE 707 AA; 79495 MW; 128A84EA4CF0C476 CRC64;
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                               GLGEEEPPALPSKLLSSGSCKADLGCRSYTDELHAVAP
                                                                                                                               AALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSS
                                                                                                                                                                                                  KPDSGLVLNDVMCKPGPESDFCLKVEAAVLGATGPADSQHESQHGGLDQDGEARPALDGS
                                                                                                                                                                                                                               KFDSGLVLNDVMCKPGPESDFCLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGS
                                                                                                                                                                                                                                                                                                                                  PGQHTRQGSRRNYFRSKSGRSLYVAICNMHQFIDEEPDWFEKQFVPFHPPPLRYREPVLE
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GLGEEEPPALPSKLLSSGSCKADLGCRSYTDELHAVAP
                                                                                               AALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSS
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Pred. No. 1.3e-269;
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SEF splice variant b.
Homo sapiens (Human).
Bukaryota, Metazoa, Chordata,
Mammalia, Eutheria, Buarchonto
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05-JUL-2004 (TrEMBLrel.
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                         KFDSGLVLNDVMCKPGPESDFCLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGS
                                                                                   LRQAKQSSSAALSKFIAVYFDYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQE
                                                                                                                                                                                                                                                                                              REGOREWVIOKIHESOFIIVVCSKGMKYFVDKKNYKHKGGGRGSGKGELFLVAVSAIAEK
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KFDSGLVLNDVMCKPGPESDFCLKVEAAVLGATGPADSQHESQHGGLDQDGEARPALDGS
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Genome Res. 13:2265-2270(2003).
EMBL; AY358774; AAQ89134.1; -; mRNA.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0004888; F:transmembrane receptor
GO; GO:0006954; P:inflammatory response;
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Mammalia; Eutheria;
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                                                                                                                                                      HAPHGSDMQVSFDHAPHNFGFRFFYLHYKLKHEGPFKRKTCKQEQTTEMTSCLLQNVSPG
                                                                                                                                                                                      ---HGSDMQVSFDHAPHNFGFRFFYLHYKLKHEGPFKRKTCKQEQTTETTSCLLQNVSPG
                                                                                                                                                                                                                                             FVKVVPFPSIKNESNYHPFFFRTRACDLLLQPDNLACKPFWKPRNLNISQHGSDMQVSFD
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Euarchontoglires; Primates; Catarrhini; Hominidae;
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97.5%;
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Pred. No. 5.16
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EMBL; AF459444; AAM28441.1; -; mRNA.
EMBL; AF494210; AAM74079.1; -; mRNA.
Ensembl; ENSMUSG0000040717; Mus musculus.
MGI; MGI:2159727; Il17rd.
GO; GO:0016020; C:integral to membrane; IEA.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0005634; C:nucleus; IEA.
GO; GO:0005634; F:mucleic acid binding; IEA.
GO; GO:0003676; F:transmembrane receptor acti
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"hSef inhibits PC-12 cell differentiation by interimitogen-activated protein kinase MAPK signaling.";
J. Biol. Chem. 278:50273-50282(2003).
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STRAIN=BALB/c;
PubMed=12958313; DOI=10.1074/jbc.M306936200;
                                                                                                                                                                                                                                                                      Xiong S.Q., Huang G.R., Zhao Q.H., Chen P.L., Chen Y., Liu L., Fu X.Y., Chang Z.J.; Submitted (MAR-2002) to the EMBL/GenBank/DDBJ
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01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
Transmembrane protein (Interleukin 17 receptor-like
                                                                                                                                                                                                                                                                                                                                                             STRAIN=BALB/c;
                                                                                                                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE.
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Name=Il17rd; Synonyms=Il17rlm, Sef;
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      receptor activity; IEA
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RESULT 7

QNI13 HUMAN

QNI13 HUMAN PRELIMINARY;

AC QNI13;

DT 01-OCT-2002 (TrEMBLrel. 22,

DT 01-PEB-2005 (TrEMBLrel. 22,

DT 01-FEB-2005 (TrEMBLrel. 29,

DT 01-FEB-2005 (TrEMBLrel. 29,

DE INTERTIEUKIN 17 receptor-lik

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InterPro; IPR000157; TIR.
InterPro; IPR007087; Znf C2H2.
PROSITE; PS50157; ZINC_FINGER_C2H2_2;
Receptor; Transmembrane.
SEQUENCE 738 AA; 82347 MW; D8CE66:
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                                                                                                GVSR-EHGCHSHTDELQALAP
                                                                                                          GSCKADLGCRSYTDELHAVAP
                                                                                                                                            MPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPALPSKLLSS
                                                                                                                                                                                                                                             DYSCEGDVPCSLDLSTKYKLMDHLPELCAHLHS--
                                                                                                                                                                                                                                                            DYSCEGDVPGILDLSTKYRLMDNLPQLCSHLHSRDHGLQEP-GQHTRQGSRRNYFRSKSG
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                                                                                                                                    MPRDSGIYDSSVPSSELSLPLMEGLSPDQIETSSLTESVSSSSGLGEEDPPTLPSKLLAS
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nilarity 86.6%;
Conservative 30
        (TrEMBLrel. 22, Created)
(TrEMBLrel. 22, Last sequence update)
(TrEMBLrel. 29, Last annotation updat
17 receptor-like protein short form (
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Pred. No. 1.2e-245;
B; Mismatches 54;
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DQTETSSLTESVSSSSGLGEEEPPALPSKLLSSGSCKADLGCRSYTDELHAVAP
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The German CDNA Consortium;

Ottenwaelder B., Obermaier B., Deutschenbaur S., Schaipp A.

Mewes H.W., Weil B., Anid C., Osanger A., Fobo G., Han M.,

Submitted (JAN-2005) to the EMBL/GenBank/DDBJ databases.

EMBL; AF494211; AAM74080.1; -; mRNA.

EMBL; AL833913; CAD38769.1; -; mRNA.

EMBL; BL83900000144730; Hono sapiens.
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"hSef inhibits PC-12 cell differentiation by interfering mitogen-activated protein kinase MAPK signaling.";

J. Biol. Chem. 278:50273-50282(2003).
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GO; GO:0004888; F:transmembrane receptor
InterPro; IPR000157; TIR.
Hypothetical protein; Receptor.
SEQUENCE 595 AA; 66846 MW; 7E6BBB64F7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUCLEOTIDE SEQUENCE.
PubMed=12958313; DOI=10.1074/jbc.M306936200;
Xiong S. Zhao O. Rong Z., Huang G., Huang
Liu L., Chang Z.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=IL17RLM; Synonyms=DKFZp434L0320;
Homo sapiens (Human).
Eukarýota, Metazoa; Chordata; Craniat
Mammalia; Eutheria; Euarchontoglires;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUCLEOTIDE SEQUENCE
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DQTETSSLTESVSSSGLGEEEPPALPSKLLSSGSCKADLGCRSYTDELHAVAP
                                                             GGLDQDGBARPALDGSAALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLST
                                                                                       GGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGLST
                                                                                                                                                  VPFHPPPLRYREPVLEKFDSGLVLNDVMCKPGPESDFCLKVEAAVLGATGPADSQHESQH
                                                                                                                                                                               VPFHPPPLRYREPVLEKFDSGLVLNDVMCKPGPESDFCLKVEAPVLGATGPADSQHESQH
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Pred. No. 6.9e
1; Mismatches
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0 HUMAN
OPUFAO_HUMAN PRELIMINARY; PRT; 564 AA.
OPUFAO;
O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-MAY-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein DKFZp434N1928 (Fragment).
Name=DKFZp434N1928;
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Homo sapiens (Human).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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GO:0004888; F:transmembrane
erPro; IPR000157; TIR.
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                                                                                                                        SDMPRDSGIYDSSVPSSELSLPLMEGLSTDQTETSSLTESVSSSSGLGEEEPPPALPSKLL
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                                                                                                                                                                                                                  GPESDFCLKVEAPVLGATGPADSQHESQHGGLDQDGEARPALDGSAALQPLLHTVKAGSP
                                                                                                                                                                                                                                                                                            SKSGRSLYVAICNMHQFIDEEPDWFEKQFVPFHPPPLRYREPVLEKFDSGLVLNDVMCKP
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01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
FGF signaling antagonist SEF.
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasiani
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EMBL; AY278204; AAP70001.; -; mRNA.

Ensembl; ENSGALGO000000549; Gallus gallus.

GO; GO:0016020; C:membrane; IEA.

GO; GO:0004888; F:transmembrane receptor activity;

GO; GO:0006954; P:inflammatory response; IEA.

InterPro; IPR000157; TIR.

InterPro; IPR000157; TIR.

SEQUENCE 741 AA; 83553 MW; 64B8E88241AC60CF CRO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "MKP3 mediates the cellular response to FGF8 signalling in the
vertebrate limb.";
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                                                                 YFDYSCEGDVPGILDLSTKYRLMDNLFQLCSHLHSRDHGLQEPGQHTRQGSRRNYFRSKS
                                                                                                                                   RAIAITVPLVVISAFATLFTVMCRKKQQENIYSHLDEESSESSAYGAGLPVERLRPRPKV
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Pred. No. 7.1e-208;
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Mismatches 112;
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OC Archosou
OC Archosou
OC Gallus;
AC TISUE-F
AC MCDLINE-F
RA NOVAECHK
RA Eisenhab
RT TISUE-F
RX MEDLINE-RA NOVAECHK
RA Eisenhab
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01-MAR-2003
01-MAR-2004
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NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                 Trends Biochem. Sci. 28:226-229(2003).
EMBL; AJ508679; CAD48485.1; -; mRNA.
Ensembl; ENSGALGO000005499; Gallus gallus.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0004888; F:transmembrane receptor activity; IEA.
Interpro; IPR000157; TIR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ramme-ver, (Chicken).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=Facial mesenchyme;

MEDLINE=22651784; PubMed=12765832; DOI=10.1016/S0968-0004(03)00067-7;

Novatchkova M., Leibbrandt A., Werzowa J., Neubueser A.,
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                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                        121
   343
                                                                                                                         223
                                                                                                                                                                                                                                 103 LGIEFLKGFRVILEELKSEGRQCQQLILKDPKQLNSSFKRTGMESQPFLNMKFETDYFVK 162
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                                                                                                                                                                                                                                                                                            43 GVGPASRNSGLYNITFKYDNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILMSPGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             _CHICK PRELIMINARY;
                                                                                                                                                    HNFGFRFFYLHYKLKHEGPFKRKTCKQEQTTETTSCLLQNVSPGDYIIELVDDTNTTRKV
YTAALPRERLRPRPKVFLCYSSKDGQNHMNVVQCFAYFLQDFCGCEVALDLWEDFSLCRE
                                                                                           HNFGFRYYFLHYKLKHEGPFKQKTCKQDQNTDTTSCILQNVTPGDYIIELVDDTNTTRKT
                                                                                                                                                                                                            IGIEYLRGFRVILEELKSEGRQCQQMVLRDPKQLSPSFKRTGMESNPFANLKFETDYFVK
                                                                                                                                                                                                                                                                              GLSSVTKSNGLLNITFKYDNCTPYLNSVGKHVIGDVQNITISQYACYEQVAVTILWTANA
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                                                                                                                                                                                                                                                                                                                                                                                                      697 AA; 79259 MW;
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(TrEMBLrel. 23, Last sequence update)
(TrEMBLrel. 26, Last annotation updat
(Pragment).
                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                        71.6%;
75.5%;
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                                                                             Query Match
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Matches 505
                                                                                                                                                      Xiong S., Zhao Q., Rong Z., Huang G., Huang Y., Chen P., Zha Liu L., Chang Z.;

"hSef inhibits PC-12 cell differentiation by interfering wit mitogen-activated protein kinase MAPK signaling.";

J. Biol. Chem. 278:50273-50282 (2003).

REMBL; AF494209; AAM74078.1; -; mRNA.

RGG; GG:00160209; C:membrane; IEA.

RGG; GO:0005634; C:nucleus; IEA.

RGG; GO:0003676; F:nucleic acid binding; IEA.

RGG; GO:0003676; F:riransmembrane receptor activity; IEA.

RGG; GO:0008270; F:zinc ion binding; IEA.

RGG; GO:0008270; F:zinc ion binding; IEA.

R InterPro; IPR007087; ZINC_FINGER_C2H2_2; 1.
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47 MOUSE
QBK447_N
                                                                                                                                     Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                STRAIN=BALB/c;
STRAIN=BALB/c;
PubMed=12958313; DOI=10.1074/jbc.M306936200;
Phan O. Rong Z., Huang G., Huang
                                                                                                                                                                                                                                                                                                                                                                                                                      Bukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Euarchonto
Muridae; Murinae; Mus.
MCBI TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QHK447 MOUSE PRELIMINARY; PRT; 594 AA. QBK447; QBK447; QBK447; QCT-2002 (TrEMBLrel. 22, Created) O1-CCT-2002 (TrEMBLrel. 22, Last sequence update) O1-MAR-2004 (TrEMBLrel. 26, Last annotation updat Interleukin 17 receptor-like protein short form.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=Il17rd; Synonyms=Il17rlm;
Mus musculus (Mouse).
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                                                                                             Similarity
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                                                                                                                                   594
                                                                                Conservative
                                                                                                                                   AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Glires; Rodentia; Sciurogna
                                                                                                                                  66780 MW;
                                                                             67.5%; Score 2665.5; DB 2;
84.6%; Pred. No. 5.9e-191;
Live 35; Mismatches 50;
                                                                                                                                     EABE6B655DCF4EC3 CRC64;
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                                                                                Indels
                                                                                                        Length 594;
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                                                                                                                          "Sef is a feedback-induced antagonist of signalling.";
Nat. Cell Biol. 4:170-174(2002).
EMBL; AR424804; AAL79530.1; -; mRNA.
MGI; MGI:2159727; Ill7rd.
GO; GO:0005674; C:nucheleus; IEA.
GO; GO:0005676; F:nucleic acid binding;
GO; GO:0004888; F:transmembrane receptor;
GO; GO:0008270; F:zinc ion binding; IEA.
InterPro; IPRO070157; TIR.
InterPro; IPRO070157; TIR.
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SEQUENCE 582 AA; 65263 MW; 56663B298
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MEDLINE=21824237; PubMed=11802165; DOI=10.1038/ncb750;
Furthauer M., Lin W., Ang S.L., Thisse B., Thisse C.;
"Sef is a feedback-induced antagonist of Ras/MAPK-mediated
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lat. Cell Biol. 4:170-174(2002).
lmbi, AF424804; AAL79530.1; -; mRNA.
lGI; MGI:2159727; II17rd.
lO; GO:0016020; C:membrane; IEA.
lO; GO:0005634; C:muclelus; IEA.
lO; GO:00056376; F:nucleic acid binding; IEA.
lO; GO:0004888; F:transmembrane receptor #
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   Score 2606.5; DB 2;
Pred. No. 1.5e-186;
5; Mismatches 49;
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Similarity

49.8%; Score 1966; DB 2; 52.4%; Pred. No. 2.3e-138; ive 111; Mismatches 198;

198;

Indels

46;

Gaps

57

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01-JUN-2002
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MEDLINE=21824236; PubMed=11802164; DOI=10.1038/ncb749; TBang M., Friesel R., Kudoh T., David I.; TBang M., Friesel R., Kudoh T., David I.; "Identification of Sef, a novel modulator of FGF signa Nat. Cell Biol. 4:165-169(2002).

RMBL, AF364103; AAL/6112.1; -; mRNA.
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Cyprinidae; Danio.
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MEDLINE=21824237; PubMed=11802165; DOI=10.1038/ncb750; Furthauer M., Lin W., Ang S.L., Thisse B., Thisse C.; "Sef is a feedback-induced antagonist of Ras/MAPK-mediated signalling.";
Nat. Cell Biol. 4:170-174(2002).
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Matches 259; Conserv
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Tetraodon nigroviridis (Green puffer).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metozoa; Chordata; Teleostei; Euteleostei; Neoteleostei;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoides; Tetraodontidae; Tetraodon.
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Submitted (PEB-2004) to the EMBL/GenBank/DDBJ databases.
-i- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry whi
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Nature 431:946-957(2004).
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6.7	6.7	7.0	7.2	12.7	24.1	44.4	44.4	49.4	49.4	49:5	49.5	51.2	51.2	55.6	55.6	67.3	67.3	67.3	67.3	67.3	67.3
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240	Db . 181 TACAACATCACCTTCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCAT	
240	OY 181 TACAACATCACCTTCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCAT	
180	Db 121 TGGGGCGTCGACACCTGTGGCTGGAGGGGAGTGGGGCCAGCCA	
180	OY 121 TGGGGCTCGACACCTGTGGCTGGAGGGGAGTGGGGCCAGCAGAAACAGTGGGCTG	
120	Db 61 GTCAACGCCTCCAACGGCTCGCAGCTGGCTGGCCGCTGGCCGGCTCCGCCCGC	
120	OY 61 GTCAACGCCTGCCTCAACGCTCGCAGCTGGCTGTGGCCGCTGGCGGGTCCGGCCGCGCG	
60	Db 1 TGGCTGGGCGACGGCCATGGCCCCGTGCAGCTCTGCTCCGTCTTTACG	
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	; LOCATION: (22)(2235) US-09-809-567-1	
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	; ORGANISM: HOMO Bapiens	
	; LENGTH: 3083	
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	FILING DATE:	
	. PRIOR FILING DATE: 2000-11-28	
	; CURRENT APPLICATION NUMBER: US/09/809,567 ; CURRENT FILING DATE: 2001-03-15	
	FERENCE: 01017/36916A	
	; APPLICANT: Jing, Shuqian ; TITLE OF INVENTION: IL-17 Receptor Like Molecules and Uses Thereof	
•	; Patent No. US20020045213A1 : GENERAL INFORMATION:	
	809-567 ence 1,	
	RESULT 1	

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1321 MACTACAMACACAMAGAGOTTGCCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGC

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Sequence 1, Application US/10216156

Publication No. US20030099980A1

GENERAL INFORMATION:

APPLICANT: Jing, Shuqian

TITLE OP INVENTION: IL-17 Receptor Like Molecules and

PILE REFERENCE: 01017/36916A

CURRENT PILLING DATE: 2002-08-08

PRIOR APPLICATION NUMBER: US/10/216,156

CURRENT FILING DATE: 2001-03-15

PRIOR APPLICATION NUMBER: 09/724,460

PRIOR FILING DATE: 2001-03-15

PRIOR APPLICATION NUMBER: 09/724,460

PRIOR APPLICATION NUMBER: 09/724,860

PRIOR APPLICATION NUMBER: 09/816

PRIOR APPLICATION NUMBER: 09/816

PRIOR PILING DATE: 2000-03-16

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PRIOR PILING DATE: 2000-03-16

PRIOR APPLICATION UMBER: 05/189,816

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; GI	2101 GAGAGCGTGTCCTCCTCTTCAGGCCTGGGTGAGGAGCGAACCTCCTGCCCTTCCTT
RESU US-1	2041 CTGTCTCTGCCACTGATGGAAGGACTCTCGACGGACCAGACAGA
Db 4	1981 AGCCCCTCGGACATGCCGCGGGACTCAGGCATCTATGACTCGTGTGCCCTCATCCGAG 2040
S B 7	1921 CGGCCTGCCCTTGACGGTAGCGCCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGC 1980 
S B &	1861 GGACCAGCCGACTCCCCAGCACGAGAGTCAGCATGGGGGGCCTGGACCAAGACGGGGAGGCC 1920 
S B 8	1801 AAACCAGGGCCTGAGAGTGACTTCTGCCTAAAGGTAGAGGCGCCTGTTCTTGGGGCAACC 1860 
? B 4	1741 TACCGGGAGCCAGTCTTGGAGAAATTTGATTCGGGCTTGGTTTTAAATGATGTCATGTGC 1800 
? B £	1681 GACGAGGAGCCCGACTGGTTCGAAAAGCAGTTCGTTCCCTTCCATCCTCCACTGCGC 1740
8 8 8	1621 TTCCGGAGCAAGTCAGGCCGGTCCCTATACGTCGCCATTTGCAACATGCACCAGTTTATT 1680
2 B 4	1561 CGAGACCACGGCCTCCAGGAGCCGGGGCAGCACACGCGACAGGGCAGCAGAAGGAACTAC 1620
S B 7	1501 CTGAGTACCAAGTACAGACTCATGGACAATCTTCCTCAGCTCTGTTCCCACCTGCACTCC 1560
8 8 8	1441 AAGTTTATCGCCGTCTACTTTGATTATTCCTGCGAGGGAGACGTCCCCGGTATCCTAGAC 1500 
S B 8	1381 GTGTCAGCCATTGCCGAAAAGCTCCGCCAGGCCAAGCAGAGTTCGTCCGCGGGGCTCAGC 1440 
8 B 1	1321 AACTACAAACACAAAGGAGGTGGCCGAGGCTCGGGGAAAGGAGAGCTCTTCCTGGTGGCG 1380
S B 1	1261 GAGTCCCAGTTCATCATTGTGGTTTGTTCCAAAGGTATGAAGTACTTTGTGGACAAGAAG 1320 
S B 7	1201 TGGGAAGACTTCAGCCTCTGTAGAGAAGGGCAGAGAAGAATGGGTCATCCAGAAGATCCAC 1260 
S B &	1141 GTCCAGTGTTTCGCCTACTTCCTCCAGGACTTCTGTGGCTGTGAGGTGGCTCTGGACCTG 1200
S B 1	1081 CCGCGGCCGAAGGTCTTTCTCTGCTATTCCAGTAAAGATGGCCAGAATCACATGAATGTC 1140 
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RESULT 3
10S-10-616-788-1
2 Sequence 1, Application US/10616788
2 Publication No. US20040048338A1
2 GENERAL INFORMATION:
3 APPLICANT: Jing, Shuqian

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; TITLE OF INVENTION: IL-17 Receptor Like Molecules and Uses Thereof
; FILE REFERENCE: 0.1017/39525
; CURRENT APPLICATION NUMBER: US/10/616,788
; CURRENT FILING DATE: 2003-07-10
; PRIOR APPLICATION NUMBER: 09/809,567
; PRIOR FILING DATE: 2001-03-15
; PRIOR APPLICATION NUMBER: 09/724,460
; PRIOR FILING DATE: 2000-11-28
; PRIOR APPLICATION NUMBER: 09/724,460
; PRIOR FILING DATE: 2000-13-16
; PRIOR FILING DATE: 2000-03-16
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; ORGANISM: Homo Sapiens
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; NAME/KEY: CDS
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US-10-842-006-3
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Publication No. US20040235104A1
GENERAL INFORMATION:
APPLICANT: Yang, Ruey-Bing
TITLE OF INVENTION: A Novel Human SEF Molecu
TITLE OF INVENTION: Therefor
FILE REFERENCE: MPI03-0711PIRM
CURRENT APPLICATION NUMBER: US/10/842,006
CURRENT FILING DATE: 2004-05-07
PRIOR APPLICATION NUMBER: 60/49522
PRIOR FILING DATE: 2003-05-08
NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSEQ for Windows Version 4.0
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RESULT 5  US-10-842-006-1  US-10-842-006-1  Sequence 1, Application US/10842006  Philication No. US20040235104A1  GENERAL INFORMATION: A Rovel Human SEF Molecule and Uses  TITLE OF INVENTION: A Rovel Human SEF Molecule and Uses  TITLE OF INVENTION: Therefor  TITLE OF INVENTION: Therefor  FILE REFERENCE: MRICO3-07151RM  CURRENT APPLICATION UNUBER: US/10/842,006  CURRENT APPLICATION UNUBER: US/10/842,006  CURRENT FILING DATE: 2004-05-07  PRIOR FILING DATE: 2004-05-07  PRIOR FILING DATE: 2004-05-08  INUMERS OF SEQ ID NOS: 12  PRIOR FILING DATE: 2004-05-08  INUMERS OF SEQ ID NOS: 12  PRIOR FILING DATE: 2004-05-08  INUMERS OF SEQ ID NOS: 12  PRIOR FILING DATE: 2003-05-08  INUMERS OF SEQ ID NOS: 12  PRIOR FILING DATE: 2003-05-08  INUMERS OF SEQ ID NOS: 12  PRIOR FILING DATE: 2003-05-08  INUMERS OF SEQ ID NOS: 12  PRIOR FILING DATE: 2003-05-08  INUMERS OF SEQ ID NOS: 12  PRIOR FILING DATE: 2003-05-08  INUMERS OF SEQ ID NOS: 12  PRIOR FILING DATE: 2003-05-08  INUMERS OF SEG ID NOS: 12  PRIOR FILING DATE: 2003-05-08  INUMERS OF SEG ID NOS: 12  PRIOR FILING DATE: 2003-05-08  INUMERS OF SEG ID NOS: 12  PRIOR FILING DATE: 2004-05-07  PRIOR F	Db 3001 AGCTTGGGATCTTTGIGAAGGAACCTTACTTCTGTGGTGTGACATAATTGGACAAACTAC 3060  Db 3001 AGCTTGGGATCTTTGTGAAGGAACCTTACTTCTGTGGTGTGACATAATTGGACAAACTAC 3060  Qy 3061 CTACAGAGATTTAAAGCTCTAAG 3083  Db 3061 CTACAGAGATTTAAAGCTCTAAG 3083	2941 GTCGTATTATAAGCTAGGCACTGGCCGTCGTTTTACAACGTCGTGACTGGGAAAACTGCT 300	QY 2881 CTCGAGGGGCCCAAGCTTACGCGTACCCAGCTTTCTTGTACAAAGTGGTCCCTATAGTGA 2940	Qy         2821 TTTATGANATGANANAAAAAAAAAAAAAAAAAAAAAAAA	Qy 2761 ATGGGTGTTAAATAAGCTTTGAGTCAAAAGTCAAGAAAGTGACTGAATATACAGTCACCT 2820	QY 2701 AATCCATGTTGTATTGCAGATAATGTTCTCATTTATTTTTGATGTAGAATTTACATTGCC 2760	641 641
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APPLICANT: Tsinghua University
ITILE OF INVENTION: Human Interleukin-17 Receptor Like Mol
FILE REFERENCE: 12003269C-US
CURRENT APPLICATION NUMBER: US/10/608,449
CURRENT FILING DATE: 2003-06-30
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH: 4477
TYPE: DNA
ORGANISM: Homo sapiens
                                                                           US-10-608-449-1
                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/10608449 Publication No. US20040265834A1 GENERAL INFORMATION:
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Score 2822.4;
Pred. No. 0;
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	1201 TGGGAAGACTTCAGCCTCTGTAGAGAAGGGCAGAGAGAGA	<u> </u>
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TICCOGAGCAGGCAGGCCGGCCCCTATACGCCGCCATTTGCAACATGCACCAGTTTATT  TTCCGGAGCAAGTCAGGCCGGTCCCCTATACGTCGCCATTTGCAACATGCACCAGTTTATT  TTCCGGAGCAAGTCAGGCCGGTCCCCTATACGTCGCCATTTGCAACATGCACCAGTTTATTT  TTCCGGAGCAAGTCAGGCCGGTCCCTATACGTCGCCATTTGCAACATGCACCAGTTTATTT  TTCCGGAGCAAGTCAGGCCGGCCCTATACGTCGCCATTTGCAACATGCACCAGTTTATTT  TTCCGGAGCAAGTCAGGCCGGCCCTATACGTCGCCGCTTTATTTGCAGTCGAACATGCACCAGTTTATTTTTTTT	541 AATTACCACCCTTTCTTTAGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAAT 600	g &
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CIGAGIACCAAGTACAGACICAIGGACAAICIICCICAGCICIGIICCCACCIGCACICC CIGAGIACCAAGTACAGACICAIGGACAAICCITCCTCAGCICTGTTCCCACCTGCACTCC CIGAGIACCAAGTACAGACTCAIGGACAATCTTCCTCAGCTCTGTTCCCACCTGCACTCC	421 AAGCAGCTCAACAGTAGCTTCAAAAGAACTGGAATGGAA	B 8
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GTGTCAGCCATTGCCGAAAAGCTCCGCCAGGCCAAGCAGAGTTCGTCCGGGGCGCTCAGC	301 GTCACCATTCTTTGGTCCCCAGGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTA 360	B 8
	241 GTGATTGCTGACGCCAGAATATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCA 300	B &

Query Match B9.4%; Score 2757.4; DB 7; Length 4392; Best Local Similarity 99.6%; Pred. No. 0; Matches 2805; Conservative 0; Mismatches 6; Indels 4; Gaps 4;  Qy 22 ATGGCCCCGTGGCTGCAGCTCTGCTCCTTTACGGTCAACGCCTGCCT	; NAME/KEY: CDS ; LOCATION: (1)(1662) ; OTHER INFORMATION: ; PEATURE: ; NAME/KEY: mat peptide ; LOCATION: (82)() ; OTHER INFORMATION: US-10-343-348-15	NUMBER OF SEQ ID NOS: 38  SOPTWARE: PatentIn version 3.1  SEQ ID NO 15  LENGTH: 4392  TYPE: DNA  ORGANISM: Homo sapiens  FEATURE:	; APPLICANT: Micanovic, Radmila ; APPLICANT: Ou, Weijia ; APPLICANT: Su, Eric ; APPLICANT: Tschang, Sheng-Hung ; APPLICANT: Tschang, Sheng-Hung ; APPLICANT: Wang, He ; TITLE OF INVENTION: No. US20040038242A1el secreted proteins and their uses ; PILE REFERENCE: X-14001 ; CURRENT APPLICATION NUMBER: US/10/343,348	ESULT 7 2-10-343-348-15 Sequence 15, Application Publication No. US200400 GENERAL INFORMATION: APPLICANT: Edmonds, Bri	OY 2761 ATGGGTGTTAAATAAGCTTTGAGTCAAAAGTCAAGAAAGTGACTGAATATACAGTCACCT 2820	Qy 2641 TITGTGAAAAAGGCACTITTAACATCATAGCCACAGAAATCAAGTGCCAGTCTATCTGG 2700	Db 2469 TTACCGGATATCTTGACAAACTCTCCAATTTTCTAAAATGATATGGAGCTCTGAAAAGGCA 2528  Qy 2461 TGTCCATAAGGTCTGACAACAGCTTGCCAAATTTTGGTTAGTCCTTGGATCAGAGCCTGTT 2520  Db 2529 TGTCCATAAGGTCTGACAACAGCTTGCCAAATTTTGGTTAGTCCTTGGATCAGAGCCTGTT 2588  Qý 2521 GTGGGAGGAATATGTAAAGAAAACAGAAGATACCTGCACTAATCATTCA 2580
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1758 GGAGAAATTTGATTCGGGCTTGGTTTTAAATGATGTCATGTGCAAACCAGGGCCTGAGAG 1817	1222 AGAGAAGGCAGAGAGAATGGGTCATCCAGAAGATCCACGAGTTCCACAGTTCATTGTG 1281
RESULT 8  US-09-63-819A-9  Sequence 9, Application US/09863818A  Publication No. US2003092881A1  GENERAL INFORMATION: Daniel M.  PITILE OF INVENTION: MAMMALIAN RECEPTOR PROTEINS, RELATED REAGENTS AND METHODS  FILE REFERENCE: DX01170K  FULE REFERENCE: DX01170K  CURRENT PLILING DATE: 2001-05-23  PRIOR PLILING DATE: 2000-05-24  NUMBER OF SEQ ID NOS: 22  SOFTWARE: Patentin version 3.1  SEQ ID NO 9  LENGTH: 2786  TYPE: DNA  ORGANISM: Homo sapiens  FEATURE: FRATURE: NAME/KEY: CDS  LOCATION: (70)(2283)  LOCATION: (10)(10)  OTHER INFORMATION: unknown amino  NAME/KEY: misc_feature  LOCATION: (144)(144)  OTHER INFORMATION: unknown amino  NAME/KEY: misc_feature  LOCATION: (170)(170)  COTHER INFORMATION: unknown amino  NAME/KEY: misc_feature  LOCATION: (194)(144)  COTHER INFORMATION: unknown amino  NAME/KEY: misc_feature  LOCATION: (194)(144)  COTHER INFORMATION: unknown amino  NAME/KEY: misc_feature  LOCATION: (194)(144)  COTHER INFORMATION: unknown amino  NAME/KEY: misc_feature  LOCATION: (194)(144)  COTHER INFORMATION: unknown amino  NAME/KEY: misc_feature  LOCATION: (194)(144)  COTHER INFORMATION: unknown amino  NAME/KEY: misc_feature  LOCATION: (194)(144)  COTHER INFORMATION: unknown amino  NAME/KEY: misc_feature  LOCATION: (194)(194)  COTHER INFORMATION: unknown amino	Db 2281 AGCTCATCCTGGTTGCATGCCCACTTGAGCTCAATGCTTTAACAGGATATTTGC 2417  Qy 2358 AGTCAAATGCTGGCCACTACTTGTTCTCCCCTTGCCCCAACCCTTTACCGGATATCTTCAC 2417  Db 2241 AGTCAAATGCTGGCCACTACTTGTTCTCCCCTTGCCCCAACCCCTTTACCGGATATCTTCAC 2400  2418 AAACTCTCCAATTTTCTAAAATGATATGGGCTCTGAAAGGCATGTCCATAAGGTCTGAC 2470  Qy 2418 AAACTCTCCAATTTTCTAAAATGATATGGAGCTCTGAAAGGCATGTCCATAAGGTCTGAC 2460  2478 AACAGCTTGCCAAATTTTGGTTAGTCCTTGGATCAGAGCCTGTTGTGGGAGGTAAGGTCTGAC 2460  Qy 2478 AACAGCTTGCCAAATTTTGGTTAGTCCTTGGATCAGAGCCTGTTGTGGGAAGGTAAGGTAGGAAGACACTTGCATAAAAAAAA

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; OTHER INFORMATION: unknown at
; NAME/KEY: misc_feature
LOCATION: (475)..(475)
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LOCATION: (515)..(519)
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                              GAGACGACCAGCTGCCTCCATAAATGTTTCTCCAGGGGATTÁTATAATTGAGCTGGTG
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           CGGCCTGCCCTTGAACGGTAGCGCCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGC 1980
                                        GGACCAGCCGACTCCCAGCACGAGAGTCAGCATGGGGGCCTGGACCAAGACGGGGAGGCC
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                                                                                                                      TACCGGGAGCCAGTCTTGGAGAAATTTGATTCGGGCTTGGTTTTTAAATGATGTCATGTGC
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  CGGCCTGCCCTTGACGGTAGCGCCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGC
                                                                                AAACCAGGGCCTGAGAGTGACTTCTGCCTAAAGGTAGAGGCGGCTGTTCTTGGGGCAACC
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RESULT 9
US-10-749-144-9
; Sequence 9, Application US/10749144
; Publication No. US20040197306A1
; GENERAL INFORMATION:
   APPLICANT: GOTMAN, Daniel M.
; TITLE OP INVENTION: MANMALIAN RECEPTOR PROTEINS; REL
FILE REFERENCE: DX01170K1
; CURRENT APPLICATION NUMBER: US/10/749,144
; CURRENT FILING DATE: 2003-12-29
pRIOR APPLICATION NUMBER: US 60/206,862
pRIOR APPLICATION NUMBER: US 50/206,862
; PRIOR PILING DATE: 2000-05-24
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 2786
                               TYPE:
              ORGANISM: Homo sapiens
    FEATURE:
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; LOCATION: (519)..(519)
; OTHER INFORMATION: unkr
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Best Local Similarity 99.3
Matches 2718; Conservative
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LOCATION: (442)...(442)
OTHER INFORMATION: unknown a
FEATURE:
NAME/KEY: misc_feature
LOCATION: (475)...(475)
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FEATURE:
NAME/KEY: misc feature
LOCATION: (144)..(144)
OTHER INFORMATION: unknown a
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NAME/KEY: misc_feature
LOCATION: (194)...(194)
OTHER INFORMATION: unknown
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NAME/KEY: misc feature
LOCATION: (170)...(170)
OTHER INFORMATION: unknown
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OTHER INFORMATION: unknown
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                                            AGCAGNTCAACAGTAGCTTCAAAAGAACTGGAATGGAATCTCAACCTTTNCTGAATATG
                                                            ATACTGGAGGAGCTGAAGTCGGAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCG
                                                                                                                                                                           GTCACCATTCTTTGGTCCCCAGGGGCCCTCGGCATCGAAATTCCTGAAAGGATTTCGGGTA 360
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                                                                                                   ATACTGGAGGAGCTGAAGTCGGAGGGAAGACAGGCCAACAACTGATTCTAAAGGATCCG
                                                                                                                                                            GTCACCATTCTTTGGTCCCCAGGGGCCCTCGGCATCGAAATTCCTGAAAGGATTTCGGGTA
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2626 GACTICATIGAGCICIGCAAACTITGCCIGITIGCTATIGGCIACTIGGCIACTIGATITGAAATIGC 2641 TITGIGAAAAAGGCACTITTAACATCATAGCCACAGAAATCAAGTGCCAGTCTATCTGG	. D Q D	1546 CTGAGTACCAAGTACAGACTCATGGACAATCTTCCTCAGCTCTGCTCCCACCTGCACTCC 1605 1561 CGAGACCACGGCCTCCAGGAGCCGGGCAGCACCACGGCAGCAGGAAGGA	D OY
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	}	1081 CCGCGGCCGAAGGTCTTTCTCTCGCTATTCCAGTAAAGATGGCCAGAATCACATGAATGTC 1140	B 8
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	) B 5	781 GAGACGACCAGCTGCCTTCAAAATGTTTCTCCAGGGGATTATAAATGAGCTGGTG 840 	₽ &
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	) B 4	601 CTAGCTTGTAAACCCTTCTGGAAGCCTCGGAACCTGAACATCAGCCAGC	B 8
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	<u> </u>	529 AAATTTGAAACGGATTATTTCGTAAGGTTGTCCTTTTCCTTCATTAAAAACGAAAGC 585	DB B

61 GTCAACGCCTGCCTCAACGGCTCGCAGCTGGCTGTGGCCGCTGGCGGGTCCGGCCGCGC	1 TGGCTGGGCGAGCGCACGGCCATGGCCCCGTGGCTGCAGCTCTGCTCCGTCTTTTTACG 60	Query Match  87.5%; Score 2696.6; DB 8; Length 2786; Best Local Similarity 99.2%; Pred. No. 0; Matches 2718; Conservative 0; Mismatches 20; Indels 3; Gaps 1;	NAME/KEY: misc feature ; IACATION: (519) . (519) ; OTHER INFORMATION: unknown amino US-10-924-667-9			NAME/KEY: misc feature ; NAME/KEY: misc feature ; LOCATION: (194) ; COTHER INFORMATION: unknown amino ; FRATURE:				NAME/KEY: mat peptide  ; NAME/KEY: mat peptide  ; LOCATION: (118)()  ; OTHER INFORMATION:	; PAAJURE; CDS; NAME/KEY: CDS; NAME/KEY: CDS; LOCATION: (70)(2283); LOCATION: (70)(2283); CTHER INFORMATION:	O D	PRIOR FILING DATE: 2000-05-24 NUMBER OF SEQ ID NOS: 22 SOFTWARE: PatentIn version 3.	CURRENT FILING DATE: 2004- PRIOR APPLICATION NUMBER: U PRIOR FILING DATE: 2001-05- DRICH FILING DATE: 1001-05- DRICH ADDITION NUMBER: III		Sequence Publica GENERAL	RESULT 10	Qy 2701 AATCCATGTTGTATTGCAGATAATGTTCTCATTTATTTTTG 2741
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US-10-608-449-3
; Sequence 3, Application US/10608449
; Publication No. US20040265834A1
; GENERAL INFORMATION:
; APPLICANT: Teinghua University
; TITLE OF INVENTION: Human Interleukin-17 Receptor Like Molecule
; FILE REFERENCE: 12003269C-US
; CURRENT APPLICATION NUMBER: US/10/608,449
; CURRENT APPLICATION NUMBER: US/10/608,449
; CURRENT FILING DATE: 2003-06-30
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 4508
; TYPE: DNA
; ORGANISM: Homo sapiens Ś 밁 S RESULT 11 US-10-608-449-3 Query Match Best Local Similarity Matches 2690; Conserv 194 233 134 TCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACG CCTGTGGCTGGAGGGGAGTGGGGCCAGCCAGAAACAGTGGGCTGTACAACATCACCT CCTGGCCTTGGCAGGGAGTGGGGCCAGCCAGCAGAAACAGTGGGCTGTACAACATCACCT Conservative 87.1%; 99.7%; Score 2684.6; Pred. No. 0; 0; Mismatches 0; В 9 8 Indels . Length 4508

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554 622	DD 502 GIAGCITCHAAAGAACIGHAAIGH  QY 494 ATTATTTCGTAAAGGTTGTCCCTT                  Db 562 ATTATTTCGTAAAGGTTGTCCCTT	5 43 1 50 4 1	Oy 374 TGAAGTCGGAGGGAAGACAGTGCC.	Qy 314 GGTCCCCAGGGGCCCTCGGCATCG	Oy 254 CCCAGAATATCACCATCAGCCAGT	Oy 194 TCAAATATGACAATTGTACCACCT.	Qy 134 CCTGTGGCTGGAGGGAGTGGGGC	Query Match 86.9%; Best Local Similarity 99.7%; Matches 2684; Conservative	LENGTH: 2894 ; LENGTH: 2894 ; TYPE: DNA ; ORGANISM: Homo sapiens US-10-104-047-1429	PRIOR FILING DATE:  NUMBER OF SEQ ID NOS: 4096  SOPTWARE: PALENTIN Ver. 2.1  SEO ID NO 1429	FILE REPERENCE: H1-A0105  CURRENT APPLICATION NUMBER: US/10/104,047  CURRENT FILING DATE: 2002-03-25  PRIOR APPLICATION NUMBER:	; Publication No. US20030236392A1 ; Publication No. US20030236392A1 ; GENERAL INFORMATION: ; APPLICANT: HELIX RESEARCH INSTITUTE APPLICANT: HELIX RESEARCH INSTITUTE APPLICANT: HELIX RESEARCH INSTITUTE APPLICANT: HELIX RESEARCH INSTITUTE APPLICANTION. NO. US20030236282A101 6:11	RESULT 12 US-10-104-047-1429 . Seminore 1820 Application US/101040	Qy 2774 AAGCITTGAGTCAAAAGTCAAGAA	Qy 2714 TIGCAGATAATGTICTCATTTATT	Qy 2654 GCACTTTTAACATCATAGCCACAG,	Oy 2594 TCTGCAAACTTTGCCTGTTTGCTA
	GIAGUILLAAAAGAACIGGAAIGGAAICILAACCIIICCIGAAIAIGAAAIIIGAAAITIGAAAICG 561 ATTATTTCGTAAAGGTTGTCCCTTTTCCTTCCATTAAAACGAAAGCAATTACCACCCTT 553		TGAAGTCGGAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGAAGCAGCTCAACA 433	GGTCCCCAGGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGC 373	CCCAGAATATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCAGTCACCATTCTTT 313	TCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATGCTGACG 253	aaacagtgggctgtacaacai              haacagtgggctgtacaacai	Score 2678.6; DB 6; Length 2894; Pred. No. 0; 0; Mismatches 9; Indels 0; Gaps 0;			14, 047	ONIO 6:11 Joseph Davis	7	AAGCTTTGAGTCAAAAGTCAAGAAAGTGACTGAATATACAGTCACCTTTTATGAAATGA 2832 	TIGCAGATAATGITCTCATITATITTTGATGTAGAATTTTACATTGCCATGGGTGTTAAAT 2773	GCACTTTTAACATCATAGCCACAGAAATCAAGTGCCAGTCTATCTGGAATCCATGTTGTA 2713 	TCTGCAAACTTTGCCTGTTTGCTATTGGCTACCTTGATTTGAAATGCTTTGTGAAAAAAG 2653 
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                                    TTGCAGATAATGTTCTCATTTATTTTTGATGTAGAATTTACATTGCCATGGGTGTTAAAT
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APPLICANT: BAUGHN, MATIAN R., LAWY, APPLICANT: YUE, Henry BANDMAN, Olga, APPLICANT: JONES, Karen Anne, BECHA, Shanya D.; APPLICANT: TRAN, Uyen K.; AU-YOUNG, Janice K.; APPLICANT: GRIFFIN, Jennifer A.; ZEBAZJADIAN, Yeganeh; APPLICANT: LEE, Enrestine A.; ELICOTT, Vicki S.; APPLICANT: THANGAVELU, Kavitha; RAMKUMAR, Jayalaxmi; APPLICANT: THANGAVELU, Kavitha; RAMKUMAR, Jayalaxmi; APPLICANT: CHANLA, Narinder K.; ISON, Craig H. APPLICANT: EMERLING, Brooke M.; YAO, Monique G.; APPLICANT: COCKS, Benjamin G.; SANJAWALA, Bharati; APPLICANT: LI, Joana X.; FORSYTHE, Ian J.; APPLICANT: LI, Joana X.; FORSYTHE, Ian J.; APPLICANT: GURGHAJAN, Rajagopal; GIETZEN, Kimberly J. TITLE OF INVENTION NUMBER: US/10/477,714
CURRENT FAPLICATION NUMBER: DS/10/477,714
CURRENT APPLICATION NUMBER: PCT/USO2/15899
PRIOR RILING DATE: 2001-05-16
PRIOR APPLICATION NUMBER: US 60/297,012
PRIOR APPLICATION NUMBER: US 60/297,012
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Best Local Similarity
Matches 2624; Conserva
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OGRGANISM: Homo sapiens
PEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No: 6986529CB1
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HONCHELL, Cynthia D.; KALLICK, Deborah
BAUGHN, Mariah R.; TANG, Y.Tom;
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Qy  517 TTTCCTTCCATTAAAAACGAAAGCAATTACCACCCTTTCTTT	Query Match 78.7%; Score 2426.4; DB 7; Length 3948; Best Local Similarity 99.8%; Pred. No. 0; Matches 2430; Conservative 0; Mismatches 6; Indels 0; Gaps 0; Matches 2430; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  Oy 397 CAACAACTGATTCTAAAGGATCGAAGCAGCTCAACAGTAGCTTCAAAAGAACTGGAATG 456	mo варіепв . S 0)(1844)	; PRIOR APPLICATION NUMBER: US 10/225,251 ; PRIOR FILING DATE: 2002-08-20 ; PRIOR PILING DATE: 2002-03-05 ; PRIOR PILING DATE: 2002-03-05 ; PRIOR APPLICATION NUMBER: US 09/799,451 ; PRIOR PILING DATE: 2001-03-05 ; NUMBER OF SEQ ID NOS: 950 ; SOPTWARE: pL_FL_genes Version 2.0	APPLICANT: Tang, Y. Tom  APPLICANT: Tue, Aidong J.  APPLICANT: Xue, Aidong J.  APPLICANT: Drmanac, Radoje T.  APPLICANT: Drmanac, Radoje T.  TITLE OF INVENTION: No. US20040053250A1el Arginine-rich Protein-like Nucleic Acids an FILE REPERENCE: 803 1CNCP  CURRENT APPLICATION NUMBER: US/10/302,172  CURRENT FILING DATE: 2002-11-21	2844 AAAAGTCAAGAAAGTGACTGAATATACAGTCACCTTTTATGAAATGA 2890 RESULT 14 US-10-302-172-125 ; Sequence 125, Application US/10302172 ; Publication No. US20040053250A1	2726 2784 2786	Db 2604 AAGAAAACAGGAAGATACCTGCACTAATCATTCAGACTTCATTGAGACTCTGCAAAACTTT 2663  Qy 2606 GCCTGTTTGCTATTGGCTACCTTGATTTGAAAATGCTTTGTGAAAAAAAGGCACTTTTAACA 2665
Qy 1597 CGACAGGCACAGAAGAACTACTTCCGGAGCAAGTCAGGCCGTCCCTATACGTCGC 1656	CAGAGTTCGTCCGCGGGGCTCAGCAAGTTTATCGCCGTCTACTTTGATTATTCCTGCGAG  GGAGACGTCCCCGGTATCCTAGACCTGAGTTACCAAGTTACTTTGATTATTCCTGCGAG  GGAGACGTCCCCGGTATCCTAGACCTGAGTACCAAGTACAGACTCATGGACAATCTTCCT  [	Qy 1297 ATGANGTACTTTGTGGACAAGAAGAACTACAAAAGAGGAAAGGCTCGGGG 1356	1177 GGCTGTGAGGTGGCTCTGGAACCTGTGGGAAGACTTCAGCCTCTGTAGAGAAGGGCAGAGA	Qy 1057 GCACTCCCAAGAGAGAGAGGCTCCGGCCGAAGGTCTTTCTCTGCTATTCCAGTAAA 1116	Oy 937 CCACTGGTAGTCATATCGGCATTCGGCACGCTCTTCACTGTGATGTGCCGCAAGAAGCAA 996		697 GGCTTCCGTTTCTTCTATCTTCACAAGCTCAAGCACGAAGGACCTTTCAAGCGAAAG

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                                           TTTTGATGTAGAATTTACATTGCCATGGGTGTTAAATAAGCTTTGAGTCAAAAGTCAAGA
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Sequence 7, Application US/09912157
; Patent No. US20020165348A1
; GENERAL INFORMATION:
APPLICANT: KNESTNET, ROIf E.
APPLICANT: KNESTNET, ROIf E.
APPLICANT: Gao, Zeren
TITLE OF INVENTION: Human Cytokine Receptor
FILE REFERENCE: 00-49
; CURRENT APPLICATION NUMBER: US/09/912,157
; CURRENT APPLICATION NUMBER: US/09/912,157
; CURRENT FILING DATE: 2001-07-23
; NUMBER OF SEQ ID NOS: 13
; SOFTWARB: FASTSEQ for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 2341
TYPE: DNA
; ORGANISM: Homo sapiens
FEATURE:
 NAME/KEY: CDS
; NAME/KEY: CDS
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500	1441 AAGTTTATCGCCGTCTACTTTGATTATTCCTGCGAGGGAGACGTCCCCGGTATCCTAGAC 15 
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50	901 TGGGCCGGGCCCATCAGAGCCATGGCCATCACAGTGCCACTGGTAGTCATATCGGCATTC 96
0 4	841 GATGACACTAACACAAGAAAAGTGATGCATTÁTGCCTTAAAGCCAGTGCACTCCCCG 90 
4 0	781 GAGACGACCAGCTGCCTCCAAAATGTTTCTCCAGGGGATTATATATA
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2161 CTCCTCTTCTGGGTCATGCAAAGCAGATCTTGGTTGCCGCAGCTACACTGATGAACTC	Ş
2165 GAGAGCGTGTCCTCTTCAGGCCTGGGTGAGGAGGAACCTCCTGCCCTTCCTT	DЬ
2101 GAGAGCGTGTCCTCCTCTTCAGGCCTGGGTGAGGAGGAACCTCCTGCCCCTTCCTT	Ą
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1925 GGACCAGCCGACTCCCAGCACGAGAGTCAGCATGGGGGCCTGGACCAAGACGGGGAGGCC	망
1861 GGACCAGCCGACTCCCAGCACGAGAGTCAGCATGGGGGCCTGGACCAAGACGGGGAGGCC	Ş
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Search completed: March 1, 2006, 07:50:41 Job time: 2382 secs

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Sequence 44, Appl
Sequence 50, Appl
Sequence 50990, A
Sequence 50991, A
Sequence 672368,
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Sequence 36133, A
Sequence 36133, A
Sequence 181, App
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                 Sequence 1, Appli
Sequence 20, Appl
Sequence 21, Appl
Sequence 11, Appl
Sequence 111, App
Sequence 121, App
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US-11-136-527-3432	US-11-136-527-7568	US-11-136-527-7528	US-11-136-527-7440	US-11-136-527-6258	US-11-136-527-6169	US-11-136-527-4674	US-11-136-527-4661	US-11-136-527-4563	US-11-136-527-4397	US-11-136-527-5194	US-11-136-527-1098	US-11-136-527-5056	US-11-136-527-960	US-11-136-527-320	US-10-986-501-57	US-11-136-527-4416	US-11-136-527-1042	US-11-136-527-5138	US-10-674-767-3	US-10-948-344-2	US-10-521-768-4	US-10-521-768-2	US-10-521-768-1	US-11-170-751-5
•	Sequence 7568, Ap	•	•	•	•	Sequence 4674, Ap	Sequence 4661, Ap	•	Sequence 4397, Ap	•	Sequence 1098, Ap	Sequence 5056, Ap	Sequence 960, App	Sequence 320, App	Sequence 57, Appl	Sequence 4416, Ap	Sequence 1042, Ap	Sequence 5138, Ap	Sequence 3, Appli	Sequence 2, Appli	Sequence 4, Appli	Sequence 2, Appli	Sequence 1, Appli	Sequence 5, Appli

## ALIGNMENTS

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; LENGTH: 2894
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-072-512-1429
                                                                                                                                                                                                                                                                                                                        APPLICANT: OTSUKA, KAORU
APPLICANT: NAGAI, KEIICHI
APPLICANT: IRIE, RYOTARO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: OTSUKA, MOTOYUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MAGHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: NOVEL 1011 length cDNA
FILE REFERENCE: 084335-0191
CURRENT APPLICATION NUMBER: US/11/072,512
CURRENT FILING DATE: 205-03-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1429, Application US/11072512
Publication No. US20060029945A1
GENERAL INFORMATION:
APPLICANT: ISOGAI, TAKAO
                                                                                                                                                                      SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1429
                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/350,978
PRIOR FILING DATE: 2002-01-25
PRIOR APPLICATION NUMBER: JP 2001-379298
PRIOR FILING DATE: 2001-11-05
NUMBER OF SEQ ID NOS: 4096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTSUKI, TETSUJI
WAKAMATSU, AI
SATO, HIROYUKI
ISHII, SHIZUKO
YAMAMOTO, JUN-ICHI
ISONO, YUUKO
HIO, YURI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUGIYAMA,
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                      86.9%;
99.7%;
; Score 2678.6; pred. No. 0; 0; Mismatches
                                             DB 9;
                                           Length 2894;
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Indels

0 Gaps

134 CCTUTOGCCTTGAAGGGGAAGCCCACCACACACGGTGAACCACTGACCACTGACCACTTACCCTTTGAACCACTGCCTTTGAACCACTGCCCTTTGAACCACTGCCCTTCACACACTGCCCTTCACACACTGCCCTTTGAACCACTGCCCTTCACACACTGCCCCCCACACACA
Db 1282 GCCTCTTGATT  Db 1342 TCATTGTNGATT  Db 1342 TCATTGTNGTTT  Db 1342 TCATTGTNGTTT  Qy 1334 AAGGAGGTGGCT  Qy 1334 CCGAAAAGCTTCATG  Qy 1334 CCGAAAAGCTTCATG  Qy 13462 CCGAAAAGCTTCATG  Qy 1454 TCTACTTTGATT  Db 1582 ACAGACTCATGAT  Qy 1574 TCCAGGAGCTCATG  Qy 1574 TCCAGGAGCTCATG  Qy 1574 TCCAGGAGCTCATG  Qy 1574 CCCAGGACCTCATG  Qy 1634 CAGGCCGGTCCC  Qy 1634 CAGGCCGGTCCC  Qy 1634 CAGGCTGACTTCT  Db 1702 CAGGCCGGTCCC  Qy 1634 ACTGGTTGGAAAAA  Qy 1754 TCTTGGAGAAAA  Qy 1754 TCTTGGAGAAAA  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 TGCCGCGCGGAGI  Db 2062 TGCTCTCCAGGCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 ACGGTAGCGCCCC  Qy 1934 ACGGTAGCGAGAGI  Db 2062 TGCTCTTCAGGCC  Qy 1934 ACGGTAGCGAGAGI  Db 2062 TGCTCTTCAGGCC  Qy 1934 ACGGTAGCGAGAGI  Db 2262 TGATGGAAAGGAA  Qy 2114 CCTCTTTCAGGCC  Qy 2174 GGTCATGCAAAC  Qy 2114 CCTCTTTCAGGCC  Qy 2142 CTTTGTAACAAC  Qy 2234 CTTTGTAACAAC

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RESULT 2
US-11-251-821-44/c
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Publication No. US20060035272A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                         SEQ ID NO 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: COMPOSITIONS AND METHODS FILE REFERENCE: 0942.5120002 CURRENT APPLICATION NUMBER: US/11/251,821 CURRENT FILING DATE: 2005-10-18 PRIOR APPLICATION NUMBER: US 10/640,422 PRIOR FILING DATE: 2003-08-14
                                                                                PRIOR FILING DATE: 1998-10-23
PRIOR APPLICATION NUMBER: US 60/065,930
PRIOR FILING DATE: 1997-10-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: BRASCH, MICHAEL A.
APPLICANT: CHEO, DAVID
                                                            NUMBER OF SEQ ID NOS: 63
                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 60/402,920 FILING DATE: 2002-08-14 APPLICATION NUMBER: US 10/151,690 FILING DATE: 2002-05-21
                                                                                                                                                                                                                                                FILING DATE: 2001-05-21
APPLICATION NUMBER: US 09/732,914
FILING DATE: 2000-12-11
                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 09/907,719 FILING DATE: 2001-07-19 APPLICATION NUMBER: US 60/291,973
                                                                                                                                                                APPLICATION NUMBER: US 60/188,020 FILING DATE: 2000-03-09 APPLICATION NUMBER: US 60/169,983 FILING DATE: 1999-12-10
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                                                                                                                                            APPLICATION NUMBER: US 09/177,387
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ESPOSITO, DOMINIC
BYRD, DEVON R.N.
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                                                              ; OTHER INFORMATION: US-11-251-821-63
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Publication No. US20060035272A1
GENERAL INFORMATION:
APPLICANT: BRASCH, MICHAEL A.
APPLICANT: CHEO, DAVID
                                                                                                                                                                                     SOFTWARE: PatentIn
SEQ ID NO 63
  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 223;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/402,920 PRIOR FILING DATE: 2002-08-14 PRIOR APPLICATION NUMBER: US 10/151,690 PRIOR FILING DATE: 2002-05-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2003-08-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/11/251,821
CURRENT FILING DATE: 2005-10-18
                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 63
                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US PRIOR FILING DATE: 1997-10-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR USE IN ISOLATION OF NUCLEIC ACID MOLE FILE REPERENCE: 0942.5120002
                                                                                                   TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                LENGTH: 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 09/907,719 FILING DATE: 2001-07-19
                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 09/177,387 FILING DATE: 1998-10-23
                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 60/169,983 FILING DATE: 1999-12-10.
                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 2000-03-09
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 60/188,020
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 09/732,914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 60/291,973
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                                                                                  attB cloning vector pCMVSPORT6.0
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  5.0%;
99.4%;
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Pred. No. 4.6e-37;
Score 154.4; DB 9; Length 405; Pred. No. 4.8e-23;
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APPLICANT: Wang, David G.

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single

TITLE OF INVENTION: Nuclectide Polymorphisms in the Human Genome

FILE REFERENCE: 108827.135

CURRENT PILING DATE: 2001-08-08

PRIOR APPLICATION NUMBER: US 60/243,096

PRIOR APPLICATION NUMBER: US 60/243,096

PRIOR FILING DATE: 2000-10-24

PRIOR FILING DATE: 2000-11-20

PRIOR FILING DATE: 2000-11-20

PRIOR PRIOR PILING DATE: 2000-11-30

PRIOR APPLICATION NUMBER: US 60/250,092

PRIOR APPLICATION NUMBER: US 60/261,766

PRIOR APPLICATION NUMBER: US 60/261,766

PRIOR APPLICATION NUMBER: US 60/261,766

PRIOR PILING DATE: 2001-01-16

PRIOR PILING DATE: 2001-01-16

PRIOR PILING DATE: 2001-01-16

PRIOR PILING DATE: 2001-05-09

NUMBER OF SEO ID NOS: 957086
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                 Sequence 50991, Application US/09925065A

Publication No. US20040181048A1

GENERAL INFORMATION:
APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
FILE REFERENCE: 108827:135

CURRENT APPLICATION NUMBER: US/09/925,065A

CURRENT FILING DATE: 2001-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 50990
LENGTH: 612
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PRIOR APPLICATION NUMBER: US 60/243,096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTCTGGAAGCCTCGGAACCTGAACATCAGCCAGCATGGCTCCGGACATGCAGGTGTCC
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97.5%;
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PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR PILING DATE: 2000-10-24
PRIOR PILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2000-10-30
PRIOR FILING DATE: 2000-10-30
PRIOR PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR PILING DATE: 2001-01-16
PRIOR PILING DATE: 2001-05-09
NUMBER OF SEQ ID NOS: 957086
SOPTWARE: PASESEQ for Windows Version 4.0
SEQ ID NO 672368
LENGTH: 2387
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PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2000-11-16
PRIOR FILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR FILING DATE: 2001-05-09
NUMBER OF SEQ ID NOS: 957086
SOPTWARR: FABESEQ for Windows Version 4.0
SEQ ID NO 50991
LENGTH: 612
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                                                                                                                                                                                                                  ; TYPE: DNA; Homo sapiens US-09-925-065A-672368
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; ORGANISM: Homo sapiens
US-09-925-065A-50991
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Best Local S
Matches 155
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human
                                                                1963 CCAGTCTGGAAGCCTCGGAACCTGAACATCAGCCAGCATGGCTCGGACATGCAGGTGTCC
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155; Conserv
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CCCTTCTGGAAGCCTCGGAACCTGAACATCAGCCAGCATGGCTCGGACATGCAGGTGTCC
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                                                                                                                                      Score 152.6; DB 6; Pred. No. 2e-22; 0; Mismatches 4;
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Pred. No. 1.3
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US-11-102-026A-6
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                    Matches 192;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Monsanto Technology LLC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/11102026A
Publication No. US20060021087A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60617261
PRIOR FILING DATE: 2004-10-11
PRIOR APPLICATION NUMBER: 60669241
PRIOR FILING DATE: 2005-04-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Compositions and Methods for Control of Insect Infestations in FILE REPERENCE: 38-21(5356)
CURRENT APPLICATION NUMBER: US/11/102,026A
CURRENT FILING DATE: 2005-04-08
PRIOR APPLICATION NUMBER: 60560842
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       PERATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(1)
OTHER INFORMATION: n is a, c,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Lygus hesperus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60603421 FILING DATE: 2004-08-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 2004-06-11
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APPLICATION NUMBER: 60579062
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 2323
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                                GCCCAATTTTCCCGGACCCCCTTTTTTTTGAAAAAGGGGGCCCCTAAAGGGGGCCTATTT 2262
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 TTTTTTGGAAAGAACCCTTTTTTTGGGGGGGGGAAATATTGGGAAAAATCCCCCAAAAAA
                                                                                                   TAAGCTAGGCACTGGCCGTCGTTTTACAACGTCGTGACTGGGGAAAACTGCTAGCTTGGGA 3009
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Roberts, James K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kovalic, Dans J
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Kovalic, David K
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                                                                                                                                                                                                                                                                                                                                                                     Conservative
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Pred. No. 2.8e-15;
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US-09-925-065A-829666
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                                                                                                                                                                                                                                                                                                                                  Sequence 284, Application US/10991285
Publication No. US20060041962A1
GENERAL INFORMATION:
                                                                               PRIOR APPLICATION NUMBER: EP02076973.3
PRIOR PILING DATE: 2002-05-17
NUMBER OF SEQ ID NOS: 901
SOPTWARE: Patentin version 3.1
SEQ ID NO 284
LENGTH: 1434
TYPE: DNA
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Best Local Similarity
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TITLE OF INVENTION: GENES AND USES THEREOF TO MODULATE SECONDARY METAL
FILE REFERENCE: DIN/SEM/V116
CURRENT APPLICATION INDMESE: US/10/991,285
CURRENT FILING DATE: 2004-11-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 957086
SOFTWARE: FastSEQ for Windows Version 4.0
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PRIOR PILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
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TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Hum
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CURRENT FILING DATE: 2001-08-08
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OTHER INFORMATION: MAP2
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                 NAME/KEY: misc_feature
                                          FEATURE:
                                                           ORGANISM: Nicotiana tabacum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 599
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97.5%;
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Pred. No. 3.8
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APPLICANT: KERR, RICHARD
APPLICANT: KERR, RICHARD
APPLICANT: KOSENFELD, David
APPLICANT: ROSENFELD, David
APPLICANT: HOLM, Tom
APPLICANT: BATES, Stephen
APPLICANT: BATES, Stephen
APPLICANT: FANTIN, Dennis
TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
FILE REFERENCE: MMI1100-2
CURRENT APPLICATION NUMBER: US/10/750,185
CURRENT FILING DATE: 2003-12-31
FRIOR APPLICATION NUMBER: US 60/437,482
PRIOR APPLICATION NUMBER: US 60/437,482
PRIOR FILING DATE: 2002-12-31
NUMBER OF SFO ID NOS: 64922
SOFTWARE: PATENTIN VERSION 3.1
SEQ ID NO 36133
LENGTH: 1385
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US-10-750-623-36133
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US-10-750-185-36133
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                                                                                                                                                                                                                                                 Sequence 3613, Application US/10750623
Publication NO. US20050287531A1
GENERAL INFORMATION:
APPLICANT: MMI GENOMICS, INC.
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Matches 116;
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Best Local Similarity 98.7
Matches 113; Conservative
APPLICANT: DeNISE, Sue K.
APPLICANT: KERR, Richard
APPLICANT: ROSENFELD, David
APPLICANT: ROSENFELD, David
APPLICANT: BATES, Stephen
APPLICANT: BATES, Stephen
APPLICANT: PANTIN, Dennis
TITLE OF INVENTION: METHODS AND SYSTEMS FOR INFERRING BOVINE TRAITS
FILE REFERENCE: MMILION-1
CURRENT APPLICATION NUMBER: US/10/750,623
CURRENT FILING DATE: 2003-12-31
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APPLICANT: DENISE, Sue K.
APPLICANT: KERR, Richard
APPLICANT: ROSENFELD, David
APPLICANT: HOLM, Tom
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98.3%;
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Pred. No. 6.8e-14;
0; Mismatches 2
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; NUMBER OF SEQ ID NOS: 190
; SEQ ID NO 181
; LENGTH: 3641
; TYPE: DNA
; ORGANISM: Lygus hesperus
US-11-102-026A-181
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                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/11/102,026A
CURRENT FILING DATE: 2005-04-08
PRIOR APPLICATION NUMBER: 60560842
PRIOR FILING DATE: 2004-04-09
PRIOR PILING DATE: 2004-04-09
PRIOR FILING DATE: 2004-04-07
PRIOR FILING DATE: 2004-06-17
PRIOR APPLICATION NUMBER: 60579062
PRIOR FILING DATE: 2004-06-11
PRIOR APPLICATION NUMBER: 60603421
PRIOR APPLICATION NUMBER: 60603421
PRIOR APPLICATION NUMBER: 60617261
PRIOR APPLICATION NUMBER: 60617261
PRIOR FILING DATE: 2004-10-11
PRIOR APPLICATION NUMBER: 60617261
PRIOR FILING DATE: 2004-10-11
PRIOR FILING DATE: 2004-10-11
PRIOR FILING DATE: 2004-10-11
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; ORGANISM: Bovine
US-10-750-623-36133
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APPLICANT: Monsanto Technology LLC APPLICANT: Baum, James A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 2002-12-31
NUMBER OF SEQ ID NOS: 64922
SOFTWARE: PatentIN version 3.1
SEQ ID NO 36133
LENGTH: 1385
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APPLICANT:
APPLICANT:
                                                                            Matches
                                                                                             Query Match
Best Local Similarity
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Best Local Similarity 89.9%;
Matches 116; Conservative
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TITLE OF INVENTION: Compositions and Methods
FILE REFERENCE: 38-21 (53596)
FILE REFERENCE: 108-21 (118/11/102.026A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/437,482
                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60669241 PRIOR FILING DATE: 2005-04-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                     2770 AAATAAGCTTTGAGTCAAAAGTCAAGAAAGTGACTGAATATACAGTCACCTTTTATGAAA
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CCCTCGGTA 953
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Roberts, James
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Kovalic, David K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wu, Wei
Zhang, Bei
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Pred. No. 1.5e-08;
0; Mismatches 140
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Pred. No. 3.9e-13;
0; Mismatches 13
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APPLICANT: HUNG, MIEN-CHIE
APPLICANT: DAY, CHI-PING
APPLICANT: RAU, KUN-MING
APPLICANT: XIE, XIAOMING
APPLICANT: LI, ZHENG
TITLE OF INVENTION: CANCER SPECIFIC PROMOTERS
FILE REFERENCE: UTSC:045US
CURRENT APPLICATION NUMBER: US/11/096,622
CURRENT FILING DATE: 2005-04-01
                                                                                                                                                                                                 US-11-096-622-20/c
; Sequence 20, Application US/11096622
; Publication No. US20050260643A1
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SEQ ID NO 1
LENGTH: 6230
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US/11/068,155
PRIOR FILING DATE: 2005-02-28
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Pataria
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CURRENT APPLICATION NUMBER: US/11/193,750
CURRENT FILING DATE: 2005-07-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
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NT FILING DATE: 2005-04-01
APPLICATION NUMBER: 60/559,111
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Matches 83
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SEQ ID NO 21
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SOFTWARE: PatentIn Ver.
SEQ ID NO 20
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CURRENT FILING DATE: 2005-04-01
PRIOR APPLICATION NUMBER: 60/559,111
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: LI, ZHKNG
TITLE OF INVENTION: CANCER SPECIFIC PROMOTERS
FILE REFERENCE: UTSC: 845US
FILE REFERENCE: UTSC: 845US
                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 24
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TYPE: DNA
ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
FEATURE:
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                                                                                          3061 CTACAGAGATTTAAAGCTCTAAG 3083
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RAU, KUN-MING
XIE, XIAOMING
LI, ZHENG
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Pred. No. 1.4e-07
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1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*

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3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/1/ina/H_COMB.seq:*

6: /cgn2_6/ptodata/1/ina/PC_TUS_COMB.seq:*

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US-09-747-259-17

US-09-904-615-15

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US-09-611-339-2

US-09-620-312D-120

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Sequence 17, Appl
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PRIOR PILING DATE:
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1429
LENGTH: 2894
TYPE: DNA
ORGANISM: Homo sapiens
US-10-104-047-1429
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US-10-104-047-1429
Sequence 1429, Application US/10104047
Patent No. 6943241
Patent No. 6943241
PAPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. 6943241e1 full length cDNA
PILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
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                                 GTAGCTTCAAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATTTTGAAACGG
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  GTAGCTTCAAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATTTGAAACGG
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US-09-169-605-14
US-08-833-327-14
US-09-301-593-42
US-09-301-593-42
US-09-301-593-42
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US-08-620-312D-9
US-09-746-74-5
US-08-169-613A-1
US-08-232-463-15
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Database

Minimum DB Maximum DB

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2894; 0;

Gaps

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Db 1762 ACTIONALAGAMETROCTTCCCTTCCCTTCCCTCCCTCCCTCCCTCCCTCCCT	OY 1574 TCCAGGAGCCGGGGCAGCACACGCGACAGAGGAAGGAACTACTTCCGGAGCAAGT 1633

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FILE REFERENCE: 803
CURRENT APPLICATION NUMBER: US/09/799,451
CURRENT FILING DATE: 2001-03-05
NUMBER OF SEQ ID NOS: 948
SOPTWARE: pt_FL_genes Version 2.0
SEQ ID NO 125
LENGTH: 3948
TYPE: DNA
ORGANISM: Homo sapiens
FRATURE: NAME/KEY: CDS
LOCATION: (60)..(1844)
US-09-799-451-125
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Patent No. 6783969
GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Zhou, Ping
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Best Local Similarity 99.8%;
Matches 2430; Conservative
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TITLE OF INVENTION: No. 6783969el Nucleic Acids
TITLE OF INVENTION: Polypeptides
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Yamazaki, Victoria
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F. Wang, Zhiwei
T. Wang, Dunrui
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Wang, Yonghong
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---ch, Ryle
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                  CCCTTCCATCCTCCTCCACTGCGCTACCGGGAGCCAGTCTTGGAGAAATTTGATTCGGGC
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                                                                     ATTTGCAACATGCACCAGTTTATTGACGAGGAGCCCGACTGGTTCGAAAAGCAGTTCGTT
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                                           CTTGTTCTCCCCTTGCCCCAACCCTTTACCGGATATCTTGACAAACTCTCCAATTTTCTAA
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                                                                                                GAAATCAAGTGCCAGTCTATCTGGAATCCATGTTGTATTGCAGATAATGTTCTCATTTAT
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; ORGANISM: Homo
US-09-747-259-17
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US-09-747-259-17
; Sequence 17, Application US/09747259
; Patent No. 6569645
; GENERAL INFORMATION:
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                                                                                                  Query Match
Best Local Sim
Matches 2130;
h 67.3%;
Similarity 97.8%;
30; Conservative
                                                                                                                                                                                                                                     Sapien
                                                                                                  ; Score 2075.6; pred. No. 0; 0; Mismatches
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                                                                                                                                                           2319
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                                                      194
     170
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1056 AGCACTCCCA	936 GCCACTGGTA           951 GCCACTGGTA 996 ACAAGAAAAT           1011 ACAAGAAAAT	1 6 1 6	96	15 91 97 57			171 CAAATATGAC 255 CCAGAATATGAC                             231 CCAGAATATC 2315 GTCCCCAGGG                       291 GTCCCCAGGG
NGAGAGAGAGGCTCCGGCGGCGCGCGCGCGCGCGCGCGCGGCGGCGGCG	TCATATCGGCATTCGCGACGC	ITAATTGAGCTGGATGACA	TCTTCTATCTTCACTACAAGC TCTTCTATCTTCACTACAAGC TCTTCTATCTTCACTACAAGC AGGAGCAAACTACAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAA	CTCGGAACCTGAACATCAGCC	AAGGITGTCCCTTCCA 	SGAAGACAGTGCCAACAACTGA 	ANTIGIACIACTACTIGAATC ACTICAGCCAGTATTGCTTGCC ACCATCAGCCAGTATGCTTGCC ACCATCAGCCAGTATGCTTGCC ACCATCAGCCAGTATGCTTGC ACCATCAGCCAGTATGCTTGC ACCATCAGCATTCCTGATICCTGATICCTGATICCTGATTCCTGATICCTGATTCC
AGGACTCCCAAGAGAGAGGCTCCGGCCGACGAGGTCTTTCTCTGCTATTCCAGTAA	CCACTGGTAGTCATATCGGCATTCGCGACGCTCTTCACTGTGATGTGCCGCAAGAAGCA	AGGGATTATATATTGAGCTGGTGGATGACACTAACACAAGAAAAGTGATGATTA	CGGCTTCCGTTTCTTCTATCTTCACTACAAGCTCAAGCACGAAGGACCTTTCAAGCGAAI [	CTICTGGAAGCCTCGGAACCTGAACATCAGCCAGCATGGCTC	TTATTTCGTAAAGGTTGTCCCTTTCCTTCCATTAAAAACGAAAGCAATTACCACCCTTT	GAAGTCGGAGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGAAGCAGCTCAACAGCAAGTGCGAAGGAAG	CANATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACGCCCAGATATATGACATTGTACCACCTGACTTGAATCCAGTGGGGAAGCATGTGATTGCTTGACGCCCAGTAGTGGCAAGCATTGCACCATTCTTTGCCAGTGATATCACCATTCAGCCAGTATGCTAGCCATTCTTTTGCAGAATATCACCATTCAGCCATTGCTTGC
CCAGTAA 1115           CAGTAA 1130   CTTCTG 1175           CTTCTG 1190   CTTCTG 1235            CGCAGAG 1250	GAAGCA 995       GAAGCA 1010 CACTGC 1055       CACTGC 1070	CATTA 87       87	CGAAA 75	65 65 71	CCCTTT 554	49 43	
B & B & B &	\$ \$ \$ \$ \$	5 8 5 8 5	B & B &	B & B &	B & B &	D	B & B & B
215 219 221 221 225 227	031 031 076 091	1896 GGGG 1911 GGGG 1956 CCTG 1971 CCTG	1776 CTTC	1656 CA 	1536 TO 1551 TO 1596 GO	16 31 76 91	
		GGGCCTGGACCAAGACGGGGAGGCCCGGCCTGCCCTTGACGGTAGCGCCCGCC	CTIGGTTITAAAIGATGTCATGTGCAAACCAGGGCCTGAGAGTGACTICTGCCTAAAGGT	CATTITGCAACAITGCACCAGITITATIGACGAGGAGCCCGACTGGITCGAAAAGCAGITCGI	TCAGCTCTGTTCCCACCTGCACTCCCGAGACCACGCCTCCAGGACCCGCGCAGCACAC	GCAGAGTTCGTCCGCGGCGCTCAGCAAGTTTATCGCCGTCTACTTTGATTATTCCTGCGA	ÁGAÁTGGGTCATCCAGAÁGÁTCCACGAGTCCAGTTCATTCATTCTTGTTCCAAAGG TATGAAGTACTTTGTTGGACAAGAAGAACTACAAACACAAAGGAGGTGGCCGAGGCTCGGG TATGAAGTACTTTGTTGGACAAGAAGAACTACAAACACAAAGGAGGTGGCCGAGGCTCGGG

US-09-904-615-15

Sequence 15, Appl Patent No. 656632

Application US/09904615

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GENERAL INFORMATION:

APPLICANT: ROSEN et al.

TITLE OF INVENTION: 49 Human Secreted Proteins

FILE REFERENCE: PZ032P1

CURRENT APPLICATION NUMBER: US/09/904,615

CURRENT FILING DATE: 2001-07-16

PRIOR APPLICATION NUMBER: 09/511,554

PRIOR APPLICATION NUMBER: 60/097,917

PRIOR PILING DATE: 2000-02-23

PRIOR APPLICATION NUMBER: 60/097,917

PRIOR APPLICATION NUMBER: 60/098,634

PRIOR APPLICATION NUMBER: 60/098,634

PRIOR FILING DATE: 1998-08-31

PRIOR FILING DATE: 1998-08-31
PILE REPERENCE: PZ032P1

CURRENT APPLICATION NUMBER: US/10/054,988

CURRENT FILING DATE: 2002-01-25

PRIOR APPLICATION NUMBER: 09/904,615

PRIOR PILING DATE: 2001-07-16

PRIOR APPLICATION NUMBER: 09/511,554

PRIOR PILING DATE: 2000-02-23

PRIOR APPLICATION NUMBER: 60/097,917

PRIOR APPLICATION NUMBER: 60/098,634
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US-10-054-988-15
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; LOCATION: (2278)
; OTHER INFORMATION: n equals a,t,g,
; NAME/KEY: SITE
; LOCATION: (2290)
; OTHER INFORMATION: n equals a,t,g,
US-09-904-615-15
                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 49 Human Secreted Proteins
                                                                                                                                                                                                                                                                      Sequence 15, Appli
Patent No. 6953667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 222; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 15
LENCTH: 2334
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
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                                                                                                                                                                                                                                                                                                Application US/10054988
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89.2%; Pred. No. 7e-40;
89.2%; Indels
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Best Local S
Matches 222
                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/181,339
CURRENT FILING DATE: 1998-10-28
PRIOR APPLICATION NUMBER: US 60/063,450
PRIOR FILING DATE: 1997-10-29
NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-08-31
NUMBER OF SEQ ID NOS: 170
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 15
LENGTH: 2334
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/09181339 Patent No. 6610827
                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                      APPLICANT: Forsayeth, John R.
APPLICANT: Zhao, Byron
APPLICANT: Chavez, Raymond C.
TITLE OF INVENTION: POTASSIUM CHANNEL SUBUNIT POLYPEPTIDE
TITLE OF INVENTION: AND POLYNUCLEOTIDE COMPOSITIONS AND UTILE REFERENCE: 5865-0033.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: (2278)
OTHER INFORMATION: 1
NAME/KEY: SITE
LOCATION: (2290)
                                             NAME/KEY: CDS
LOCATION: (154)...(1647)
FEATURE:
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(2799)
OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                    TYPE: DNA
ORGANISM: Mus musculus
FEATURE:
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NAME/KEY: SITE
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                                                                                                                                                                                                       ENGTH: 2799
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89.2%; Pred. No. 7e-4
tive 0; Mismatches
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24;
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Length 2799;
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Query Match Best Local Similarity

5.8**%**;

Score 178.6; DB 3; Pred. No. 1.1e-35;

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; Sequence 12, Application US/09620312D
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                                                                                                                                                                                                                                                                                                       SOPTWARE: pt_FL_genes Version 1.0
SEQ ID NO 12
LENGTH: 2243
                                                                                 Query Match
Best Local Similarity
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                                                                                                                                                  LOCATION: (216)..(2129)
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(2243)
OTHER INFORMATION: n = a
                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 784CIP28
CURRENT APPLICATION NUMBER: US/09/620,312D
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 09/488,725
PRIOR FILING DATE: 2000-01-21
                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: No. 6569662el Nucleic Acids
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                                                                                                                                                                                                                                          NAME/KEY: CDS
                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                            FEATURE:
2088
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Asundi, vi...
Zhang, Jie
Ren, Feiyan
: Chen, Rui-hong
: Chen, Qing A.
Tman, Tom
                  Ma, Yunqing
Wang, Dunrui
Wang, Zhiwei
John Tillinghast
Drmanac, Radoje T
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AAGGAGAAGAAGAAAAAAAAAAAAAAAAAAAAAAAAGGGCGCCCTCTAGAGGTATCCCTCGAGGGGCC
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Yang, Yonghong
Wang, Jian-Rui
Zhou, Ping
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Asundi, Vinod
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                                                                                 3.7%;
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                                                               Score 113; DB 3; Length 2243; Pred. No. 9.9e-19; 0; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21;
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2147
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US-09-620-312D-108

Patent No. 6569002

APPLICANT: Tang, Y. Tom APPLICANT: Liu, Chenghua APPLICANT: Asundi, Vinod APPLICANT: Zhang, Jie Sequence 108, Application US/09620312D Patent No. 6569662

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NUMBER OF SEQ ID NOS: 1105
; SOFTWARE: pt_FI_genes Version 1.0
; SEQ ID NO 968
; LENGTH: 1277
TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME JESY: CDS
; LOCATION: (736)..(1014)
US-09-620-312D-968
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                                                                                                                                               Query Match 3.6%;
Best Local Similarity 98.3%;
Matches 113; Conservative
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Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 09/552,317
PRIOR FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 09/488,725
                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2000-01-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 656962el Nucleic Acids
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 784CIP2B
CURRENT APPLICATION NUMBER: US/09/620,312D
CURRENT FILING DATE: 2000-07-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
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                                                                                             2833 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAGGGCGGCCGCTCTAGAGTATCCCCTCGAGGGGCCC 2892
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                   2893 AAGCTTACGCGTACCCCAGCTTTCTTGTACAAAGTGGTCCCTATAGTGAGTCGTAT 2947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2892 CAAGCTTACGCGTACCCAGCTTTCTTGTACAAAGTGGTCCCTATAGTGAGTCGTATTATA 2951
                                                                       153 AATAAAAAAGAAAAAAAAAAAAAAAGGGCGGCCTCTAGAGTATCCCTCGAGGGGCCC
93
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5. 6569662
AAGCTTACGCGTACCCAGCTTTCTTGTACAAAGTGGTCCCTATAGTGAGTCGTAT 39
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Wang, Dunrui
Wang, Zhiwei
John Tillinghast
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Asundi, Vinod
Zhang, Jie
Ren, Feiyan
Chen, Rui-hong
Zhao, Qing A.
Wehrman, Tom
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Zhou, Ping
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xue, Aidong J.
Yang, Yonghong
                                                                                                                                               Score 111.8; DB 3; Pred. No. 1.5e-18; 0; Mismatches 2;
                                                                                                                                                   Indels
                                                                                                                                                                                     Length 1277;
                                                                                                                                                 0;
                                                                                                                                                 Gaps
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Ren, Feiyan Chen, Rui-hong Zhao, Qing A.

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APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 659662el Nucleic Acids and TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 784CIP2B
CURRENT FILING DATE: 2000-07-19
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR PILING DATE: 2000-04-25
PRIOR PILING DATE: 2000-04-25
PRIOR PILING DATE: 2000-01-21
NUMBER: 09/488,725
PRIOR FILING DATE: 2000-01-21
NUMBER: 09-520 ID NOS: 1105
SOPTWARE: pt_Genes Version 1.0
SEQ ID NO 108
LENGTH: 2265
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GENERAL INFORMATION:
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Best Local Similarity 98.4%;
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APPLICANT: Liu,
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NAME/KEY: CDS
LOCATION: (79)..(1614)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                             2235 GT 2236
ANT: Xue, Aidong J.

ANT: Yang, Yonghong
ANT: Wang, Jian-Rui
ANT: Wang, Jian-Rui
ANT: Zhou, Ping
ANT: Ma, Yunging
ANT: Wang, Dunrui
ANT: Wang, Dunrui
ANT: Wang, Zhiwei
ANT: John Tillinghast
ANT: Jormanac, Radoje T.

OF INVENTION: No. 6569662el Nucleic Acids and
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Xue, Aidong J.
Yang, Yonghong
Wang, Jian-Rui
Zhou, Ping
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Wang, Dunrui
Wang, Zhiwei
John Tillinghast
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Pred. No. 1.6e-17;
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ABLUMENT APPLICATION NUMBER: 09/488,725
PRIOR PILLING DATE: 2000-00-21
I UMBER OF FELLING DATE: 2000-01-21
I UMBER OF FELLING DATE: 2000-01-21
I UMBER OF SEQ ID NOS 1106
SOFTWARE: pt_FL_genes Version 1.0
SEQ ID NO 964
CENTENT: 1746
I TILING DATE: 2000-01-21
I PRIOR APPLICATION NUMBER: 09/488,725
PRIOR APPLICATION NUMBER: 09/488,725
I PRIOR PILLING DATE: 2000-01-21
I UMBER OF SEQ ID NOS 1105
SOFTWARE: pt_FL_genes Version 1.0
SEQ ID NO 964
LENGTH: 1476
TYPE: DNA
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION
APPLICANT: Tang, Y
APPLICANT: Liu, C
APPLICANT: Asundi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 964, Application US/09620312D Patent No. 6569662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.5%; Score 108.4; DB 3; Best Local Similarity 98.4%; Pred. No. 1.6e-17; Matches 120; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Polypeptides FILE REFERENCE: 784CIP2B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PEATURE:
NAME/KEY: CDS
LOCATION: (79)..(1698)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2841 AAAAAAAAAAAAAAAAAAAAAAGGGCGGCCGCTCTAGAGTATCCCCTCGAGGGGCCCCAAGCTTAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION:
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Ren, Feiyan
Chen, Rui-hong
Zhao, Qing A.
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Asundi, Vinod
Zhang, Jie
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US-09-620-312D-348
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; LOCATION: (149)..(778)
US-09-620-312D-964
                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 1105
SOFTWARE: pt FL genes Version 1.0
SEQ ID NO 348
LENGTH: 4062
TYPE: DNA
                                                                                                                                          Query Match
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Best Local Similarity 90.5%;
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                                                                                                                                                                             NAME/KEY: CDS
LOCATION: (25)..(2976)
09-620-312D-348
                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/620,312D CURRENT FILING DATE: 2000-07-19 CRIOR APPLICATION NUMBER: 09/552,317 PRIOR FILING DATE: 2000-04-25 PRIOR APPLICATION NUMBER: 09/488,725 PRIOR APPLICATION NUMBER: 09/488,725 PRIOR FILING DATE: 2000-01-21
                                                                                                                                                                                                                               ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICANT: Drmanac, Radoje T.
ITTLE OF INVENTION: No. 6569662el Nucleic Acids
ITTLE OF INVENTION: Polypeptides
ILE REFERENCE: 784CIP2B
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                                                                                                     / Match 2.9%;
Local Similarity 93.1%;
hes 95; Conservative
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                                                                    2942 TCGTAT 2947
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Wang, Zhiwei
John Tillinghast
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Xue, Aidong J.
Yang, Yonghong
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Zhang, Jie
Ren, Peiyan
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Zhou, Ping
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                                                                                                     Score 90.8; DB 3; Length 4062;
Pred. No. 7.6e-13;
0; Mismatches 7; Indels 0
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Pred. No. 3.2e-17;
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RESULT 14
US-09-620-312D-100/c
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                                                                                                         GENERAL INFORMATION APPLICANT: Tang,
                                                                                                                     Patent No. 656960-
                                                                                                                                             Sequence 100, Application US/09620312D Patent No. 6569662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: pt_FL_genes Version i.0
SEQ ID NO 742
LENGTH: 1912
                                                                                                                                                                                                                                                                                                                                                                               Matches
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (340)...(1176)
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Patent No. 6569662
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PRIOR FILING DATE: 2000-01-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/620,312D
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION UNMBER: 09/552,317
PRIOR FILING DATE: 2000-04-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ILE REFERENCE: 784CIP2B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICANT: Drmanac, Radoje T.
ITLE OF INVENTION: No. 6569662el Nucleic Acids and
ITLE OF INVENTION: Polypeptides
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Asundi, Vinod
Zhang, Jie
Ren, Feiyan
Chen, Rui-hong
Zhao, Qing A.
Wehrman, Tom
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Asundi, Vinod
Zhang, Jie
Ren, Feiyan
Chen, Rui-hong
Zhao, Qing A.
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Xue, Aidong J.
Yang, Yonghong
Wang, Jian-Rui
Zhou, Ping
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Wang, Zhiwei
John Tillinghast
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Asundi, Vinod
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Pred. No. 9.5e-13;
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Xue, Aidong J

Yang, Yonghong Wang, Jian-Rui Zhou, Ping

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APPLICANT: "DATE: Thing APPLICANT: Ma, Yunqing APPLICANT: Ma, Yunqing APPLICANT: Mang, Dunrui APPLICANT: Wang, Dunrui APPLICANT: Wang, Zhiwei APPLICANT: Drmanac, Radoje T. APPLICANT: Drmanac, Radoje T. APPLICANT: Drmanac, Radoje T. TITLE OF INVENTION: No. 6569662el Nucleic Acids and TITLE OF INVENTION: Polypeptides

FILE REFERENCE: 784CIP2B

CURRENT APPLICATION NUMBER: US/09/620,312D

CURRENT APPLICATION NUMBER: 09/99/20,312D

CURRENT APPLICATION NUMBER: 09/552,317

PRIOR APPLICATION NUMBER: 09/485,725

PRIOR APPLICATION NUMBER: 09/486,725

PRIOR APPLICATION NUMBER: 09/486,725

PRIOR FILING DATE: 2000-01-21

NUMBER OF SEQ ID NOS: 1105

SOPTWARE: DE FL_genes Version 1.0

SEQ ID NO 100

LENGTH: 2275
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 656962el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 784CIP2B
CURRENT APPLICATION NUMBER: US/09/620,312D
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR FILING DATE: 2000-04-25
PRIOR FILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 1105
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Sequence 101, Application US/09620312D

PARENT NO. 656562

; GENERAL INFORMATION:
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APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Zhang, Jie
APPLICANT: Ren, Feiyan
APPLICANT: Chen, Rui-hong
APPLICANT: Zhao, Qing A.
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Best Local Similarity 98.9%;
Matches 90; Conservative
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ORGANISM: Homo sapiens
FEATURE;
NAME/KEY: CDS
LOCATION: (770)..(2230)
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Xue, Aidong J.
Yang, Yonghong
Wang, Jian-Rui
Zhou, Ping
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Wang, Dunrui
Wang, Zhiwei
John Tillinghast
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Pred. No. 1.3e-12;
0; Mismatches 1
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Job time : 535 secs
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SEQ ID NO 101
LENGTH: 2817
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Best Local Similarity 98.9%;
Matches 90; Conservative
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ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (770)..(2359)
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Pred. No. 1.5e-12;
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207	217	222.4	222.4	391.6	468	468	738.4	881.4	1336.2	1370	1524.4	1526.8	1543.2	1578	1606.2	1713.4	2075.6	2075.6	2075.6	2075.6	2075.6	2075.6	2075.6	2075.6	2075.6
6.7	7.0	7.2	7.2	12.7	15.2	15.2	24.0	28.6	43.3	44.4	49.4	49.5	50.1	51.2	52.1	55.6	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
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Abq54204 Human ova	Adj27272 Yeast Gal	Abz58772 Nucleotid	Aac55520 attB clon	Ach39213 Human foe	Aah14084 Human cDN	Aah05385 Human cDN	Aas16201 5' portio	Adx01629 Human int	Adw21235 DNA encod	Aba95038 Murine cy	Aba95034 Human cyt	Aba95032 Human cyt		Aba95036 Human Zcy	Adw76587 House mou	Aba95037 Murine cy	Adl71309 Human IL-	Adl16649 cDNA enco	Adl16688 cDNA enco	Adg87392 Human PRO	Aad63615 Human IL-	Adb66908 cDNA enco		Ada49781 Human int	Ada43240 Human int

## ALIGNMENTS

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RESULT 1
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P-PSDB; AAU09904.
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                                                                                                                                                                                                                                                                                                16-MAR-2000; 2000US-0189816P.
28-NOV-2000; 2000US-00724460.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Interleukin 17; hIL-17 receptor like protein; immunomodulatory; anti-diabetic; immunosuppressive; anti-diabetic; immunosuppressive; anti-diabetic; hepatic; anabolic; anorectic; anti-alzheimer's; anti-parkinsonian; anti-convulsant; anti-asthmatic; dermatological; renal; osteopathic; anti-convulsant; anti-asthmatic; dermatological; renal; osteopathic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA encoding human Interleukin 17 (hIL-17) receptor like protein.
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                                                                                                                                                                                                                  (AMGE-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200168859-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     bone disease; vascular disorder; eye disorder; cancer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                vascular; cytostatic; anti-leukaemic; anti-infertility; ophthalmological;
hepatitis; anorexia; cachexia; neuronal dysfunction; lung disease;
                                                                                                                                                                                                                  AMGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product= "Interleukin 17 (IL-17) receptor like protein"
/partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note= "No stop codon given"
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CC include, for example immune disorders (e.g. inflammation, diabetes and CC transplant rejection), infections (e.g. hepatitis and septicaemia), CC weight disorders (e.g. anorexia, cachexia and obesity), neuronal CC dysfunction (e.g. Alzheimer's disease, Parkinson's disease and epilepsy), CC lung disorders (e.g. cystic fibrosis, asthma and emphysema), skin disease (e.g. cystic fibrosis, asthma and emphysema), skin disease (e.g. osteoporosis and hypercalcaemia), vascular disease (c.g. osteoporosis and hypercalcaemia), vascular disease (c.g. stroke and atherosclerosis, cancers (e.g. leukaemia, myeloma and CC breast cancer), reproductive disorders (e.g. infertility and CC miscarriage), eye disorders (e.g. glaucoma and retinal neuropathy). The CC DNA and its complements may also used as diagnostic probes to detect and CC quantitate the presence of similar nucleic acids in samples and identify CC patterns needing restorative therapy. The III/Tlp may also be used as CC antigens in the production of antibodies against the proteins and in CC assays to identify modulators of expression and activity. The anti-CC expression and activity. This sequence encodes the human Interleukin 17 (CC (II-17) receptor like protein described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 3083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      receptor like polypeptides useful as vaccines and in gene therapy. These have immunomodulatory, anti-inflammatory, anti-diabetic, anti-microbial, immunosuppressive, hepatic, anabolic, anorectic, anti-alzhaimer's, renal, anti-parkinsonian, anti-convulsant, anti-asthmatic, dermatological, osteopathic, vascular, cytostatic, anti-leukaemic, anti-infertility and ophthalmological activities. The IL-17 receptor like nucleic acids and proteins may be used to prevent and treat diseases associated with inappropriate IL-17 receptor like polypeptide (IL171p) expression. These
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acids encoding interleukin 17 receptor like polypeptides, useful for preventing, diagnosing and treating, e.g. leukemia, asthma, diabetes, psoriasis and glaucoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3083
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention describes novel nucleic acids encoding interleukin (IL) 17
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                                                GTGGGAGGTAGGGAAGTATGTAAAGAAAACAGGAAGATACCTGCACTAATCATTCA
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Homo ds; fibroblast growth factor; SEF; similar expression of FGF genes; cytostatic; cardiovascular-gen.; antiarteriosclerotic; cardiant; vasotropic; hypotensive; nephrotropic; gene therapy; diagnosis; prognosis; proliferative disorders; cardiovascular disorders; Human SEF ADU69243 10-FEB-2005 ADU69243; sapiens. disease; standard; gene (first glomerular disease; variant SEQ DNA; entry) 3083 IJ ВP NO:3. gene

US2004235104-A1 07-MAY-2004; 25-NOV-2004 2004US-00842006 Location/Qualifiers 22. .2241 /\*tag= a /product= "SEF"

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WPI; 200 P-PSDB; 2004-821320/81. DB; ADU69244.

New isolated SBF nucleic acid and polypeptide, useful for monitoring, treating, or diagnosing proliferative and/or differentiative disorders, e.g. ovarian cancer, breast cancer, or cardiovascular disorder including including

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Best Local Similarity
Matches 3083; Conser The invention relates to a novel isolated SEF (similar expression of FGF genes) nucleic acid molecule (I). An SEF of the invention has cytostatic, cardiovascular-gen., antiarteriosclerotic, cardiant, vasotropic, hypotensive, and nephrotropic activity, and may have a use in gene therapy. The SEF nucleic acids and polypeptides can be used for diagnostic assays, prognostic assays, and monitoring clinical trials. They can also be used for treating a subject at risk of or susceptible to a disorder or having a disorder associated with aberrant or unwanted SEF expression or activity. The SEF molecules can also be used for monitoring, treating, or diagnosing proliferative and/or differentiative disorders, e.g. ovarian cancer, breast cancer, colon cancer, prostatic cancer, FGF related disorder, cardiovascular disorder including arteriosclerosis, coronary artery disease, ischemia, reperfusion injury, restenosis, arterial inflammation, hypertension, endothalial disorders, and a kidney disorder, e.g. glomerulonephritis, vascular nephropathy, renal failure, or glomerular disease. The SEF molecules can also be used as markers of disorders or disease states, as markers for precursors of disease states, as markers for precursors of disease states, as markers, as markers of drug activity, or as markers of the pharmacogenomic profile of a subject. The present sequence represents a variant of the SEF nucleic actid shown in ADU69241. Disclosure; 421 361 361 301 301 241 241 181 181 121 121 61 61 GTGATTGCTGACGCCCAGAATATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCA TACAACATCACCTTCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCAT GTCAACGCCTGCCTCAACGGCTCGCAGCTGGCTGTGGCCGCTGGCGGGTCCGGCCGCGCG 3083 BP; 782 A; 807 C; 767 G; 727 T; 0 U; 0 Other; GTCACCATTCTTTGGTCCCCAGGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTA TGGCTGGGCGACGCCACGGCCATGGCCCCGTGGAGCTCTGCAGCTCCGTCTTTACG ATACTGGAGGAGCTGAAGTCGGAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCG GTCACCATTCTTTGG: GTGATTGCTGACGCCCAGAATATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCA TACAACATCACCTTCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCAT TGGCTGGGCGAGCGCCATGGCCCCGTGGCTGCAGCTCTGCTCCGTCTTTTACG Conservative SEQ ID NO 3; 46pp; English. 100.0%; Score 3083; 100.0%; Pred. No. 0; tive 0; Mismatches DB 13; 0; Indels Length 3083 0 Gape 360 300 480 420 240 240 60 420 180 120 Ö. 0 밁 Ş 밁 S 밁 5 밁 S 밁 ঠ 밁 ঠ 밁 ঠ 밁 S र् 밁 밁 S 밁 δ 문 δ 문 ð 맑 ð 닭 S 밁 1441 1321 1441 1381 1381 1321 1261 1201 1201 1141 1141 1081 1081 1021 1261 1021 961 961 901 106 841 841 781 781 721 721 199 661 109 AAGTTTATCGCCGTCTACTTTGATTATTCCTGCGAGGGAGACGTCCCCCGGTATCCTAGAC GTGTCAGCCATTGCCGAAAAAGCTCCGCCAGGCCAAGCAGAGTTCGTCCGCGGCGCTCAGC AACTACAAACACAAAGGAGGTGGCCGAGGCTCGGGGGAAAGGAGGCTCTTCCTGGTGGCG GAGTCCCAGTTCATCATTGTGGTTTGTTCCAAAGGTATGAAGTACTTTGTGGACAAGAAG TGGGAAGACTTCAGCCTCTGTAGAGAAAGGGCAGAGAGAATGGGTCATCCAGAAGATCCAC GTCCAGTGTTTCGCCTACTTCCTCCAGGACTTCTGTGGCTGTGAGGTGGCTCTGGACCTG CCGCGGCCGAAGGTCTTTCTCTGCTATTCCAGTAAAGATGGCCAGAATCACATGAATGTC TGGGCCGGGCCCATCAGAGCCATGGCCATCACAGTGCCACTGGTAGTCATATCGGCATTC GATGACACTAACACAACAAGAAAAGTGATGCATTATATGCCTTAAAGCCAGTGCACTCCCCCG GAGACGACCAGCTGCCTCCAAAATGTTTCTCCAGGGGATTATATAATTGAGCTGGTG ATGCAGGTGTCCTTCGACCACGCACCGCACAACTTCCGGCTTTCCTTCTTCTTCAC ATGCAGGTGTCCTTCGACCACGCACCGCACAACTTCCGGCTTCCGTTTCTTCTATCTTCAC GTGTCAGCCATTGCCGAAAAAGCTCCGCCAGGCCAAGCAGAGTTCGTCCGCGGCGCTCAGC AACTACAAACAAAGGAGGTGGCCGAGGCTCGGGGAAAGGAGAGCTCTTCCTGGTGGCG GAGTCCCAGTTCATCATTGTGGTTTGTTCCAAAGGTATGAAGTACTTTGTGGACAAGAAG TGGGAAGACTTCAGCCTCTGTAGAGAAGGGCAGAGAATGGGTCATCCAGAAGATCCAC GTCCAGTGTTTCGCCTACTTCCTCCAGGACTTCTGTGGCTGTGAGGTGGCTCTGGACCTG GATGACACTAACAACAAGAAAAGTGATGCATTATGCCTTAAAGCCAGTGCACTCCCCG GAGACGACCAGCTGCCTCCTTCAAAATGTTTCTCCAGGGGATTATATAAATTGAGCTGGTG TACAAGCTCAAGCACGAAGGACCTTTCAAGCGAAAGACCTGTAAGCAGGAGCAAACTACA TACAAGCTCAAGCACGAAGGACCTTTCAAGCGAAAGACCTGTAAGCAGGAGCAAACTACA CTGAGTACCAAGTACAGACTCATGGACAATCTTCCTCAGCTCTGTTCCCCACCTGCACTCC TGGGCCGGGCCCATCAGAGCCATGGCCATCACAGTGCCACTGGTAGTCATATCGGCATTC CTTTCTCTGCTATTCCAGTAAAGATGGCCAGAATCACATGAATGTC

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                                                             TTTGTGAAAAAGGCACTTTTAACATCATAGCCACAGAAATCAAGTGCCAGTCTATCTGG
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ds; gene; fibroblast growth factor; SEF; similar expression of FGF cytostatic; cardiovascular-gen.; antiarterioscientic; cardiant; vasotropic; typotensive; nephrotropic; gene therapy; diagnosis; prognosis; proliferative disorders; cardiovascular disorders; renal disease; glomerular disease.

Homo sapiens.

Location/Qualifiers 90. .2309 /\*tag= a /product=

07-MAY-2004; 2004US-00842006.

08-MAY-2003; 2003US-0469522P.

(MILL-) MILLENNIUM PHARM INC

Yang

P-PSDB; 2004-821320/81. DB; ADU69242.

New isolated SEF nucleic acid and polypeptide, useful for monitoring, treating, or diagnosing proliferative and/or differentiative disorders, e.g. ovarian cancer, breast cancer, or cardiovascular disorder including arteriosclerosis.

Claim 1; SEQ ID NO 1; 46pp; English

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밁 ð 밁 원 유 5 밁 र् 밁 ક 밁 ঠ 밁 ð 밁 ð 밁

The invention relates to a novel isolated SEF (similar expression of FGF genes) nucleic acid molecule (I). An SEF of the invention has cytostatic, cardiovascular-gen., antiarteriosclerotic, cardiant, vasotropic, hypotensive, and nephrotropic activity, and may have a use in gene therapy. The SEF nucleic acids and polypeptides can be used for the diagnostic assays, prognostic assays, and monitoring clinical trials. They can also be used for treating a subject at risk of or susceptible to

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Matches 2826; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a disorder or having a disorder associated with aberrant or unwanted SEF expression or activity. The SEF molecules can also be used for monitoring, treating, or diagnosing proliferative and/or differentiative disorders, e.g. ovarian cancer, breast cancer, colon cancer, prostatic cancer, FGF related disorder, cardiovascular disorder including arteriosclerosis, coronary artery disease, ischemia, reperfusion injury, restenosis, arterial inflammation, hypertension, endothelial disorders, and a kidney disorder, e.g. glomerulonephritis, vascular nephropathy, renal failure, or glomerular disease. The SEF molecules can also be used as markers of disorders or disease states, as markers for precursors of disease states, as markers for precursors of disease states, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as markers, as marker
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Best Local Similarity
Matches 2826; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to a new isolated IL-17RIM polynucleotide. The polynucleotide encoding the IL-17RIM polypeptide is useful in preparing a composition for treating an individual in need of an increased or decreased level of IL-17RIM polypeptide, e.g. neurological or autoimmune disease, such as rheumatoid arthritis or asthma, or kidney-or testis-related carcinoma. The present sequence represents human IL-
                                                                                                                                                                                                                                                                                                                                                            Sequence 4477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New polynucleotide encoding IL-17RLM polypeptide, useful in preparing a composition for treating e.g., neurological or autoimmune disease, such as rheumatoid arthritis or asthma, or kidney- or testis-related
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                                                                                                                                                                                                                                                                                                                                                                                        17RLM DNA.
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The invention relates to a novel human secreted polypeptide having sequence 90% identical to the polypeptide sequences of LP105, LP061, LP224, LP240, LP239(a), LP243(a), LP243(b), LP253, LP219), LP251(a), LP252, LP239(b), LP253(a), LP255(a), LP244, LP186, LP251(b), LP255(b),
                                                                                                                                 Novel polypeptides and polynucleotides of secreted proteins useful for treating various diseases such as multiple sclerosis, cancer, autoimmu diseases, osteoporosis, Alzheimer's disease and Parkinson's disease.
                                                                                               Claim 1;
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19-OCT-2000; 2000US-0241779P.
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GCACCGCACAACTTCGGCTTCCGTTTCTATCTTCACCTACAAGCTCAAGCACGAAGGA
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cancer, autoimmune diseases, arthritis, osteoporosis, Alzheimer's disease, Parkinson's disease, meningitis, encephalitis, neoplasia, trauma, ischaemia and infarction, mania, stroke, cardiovascular disease, atherosclerosis, rheumatoid arthritis, hypothyroidism, anaemia, sepsis, allergic responses, multiple sclerosis, liver failure, haemorrhages, paranola, obsessive compulsive disorder, autism, panic disorder, learning disabilities, ALS (amylotrophic lateral sclerosis) psychoses, disorders in feeding, sleep patterns, balance, and perception, Thi-dependent insulitis, adult respiratory distress syndrome (ARDS). The secreted protein is further useful for identifying compounds that bind to the secreted protein. The present sequence encodes a novel secreted protein (including complement, fragments encoding matture forms of the polypeptide or variant), a vector comprising the nucleic acid, a host cell comprising the vector, the preparation of the protein, an anti-LP antibody, ant/agonists of LP and anti-LP-encoding maNA ribozymes. The secreted protein or its agonist is useful in the manufacture of a medicament for treating a mammal suffering from a disease (and in diagnosis), condition or disorder associated with aberrant levels of the secreted protein e.g. learning

Sequence 4392 BP; 1125 A; 1050 C; 1101 G; 1116 T; 0 U; 0 Other;

Score 2757.4; Pred. No. 0; 0; Mismatches B 9 <u>ئ</u> Indels Length ٠. Gaps 4

AGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAATCTAGCTTGTAAACCCCTTCTGG AAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATTTGAAACGGATTATTTC GGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGCTGAAGTCG GGGGCCCTCGGCATCGAATTCCTGAAAGGATTTTCGGGTAATACTGGAGGAGCTGAAGTCG ATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCAGTCACCATTCTTTGGTCCCCA GACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACGCCCAGAAT TGGAGGGGAGTGGGGCAGCAGAAACAGTGGGCTGTACAACATCACCTTCAAATAT 201 TCGCAGCTGGCTGTGGCCGGCCGGGCCGCGCGCGTGGGGGCGTCGACACCTGTGGC 141 AAGCCTCGGAACCTGAACATCAGCCAGCATGGCTCGGACATGCAGGTGTCCTTCGACCAC GTAAAGGTTGTCCCTTTTCCTTCCATTAAAAACGAAAGCAATTACCACCCTTTCTTCTTT AAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATTTGAAACGGATTATTTC GAĞĞĞAAĞACAĞTĞCCAACAACTĞATTCTAAAĞĞATCCĞAAĞCAĞCTCAACAĞTAĞCTTC GAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGAAGCAGCTCAACAGTAGCTTC GACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACGCCCAGAAT AGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAATCTAGCTTGTAAACCCCTTCTGG ATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCAGTCACCATTCTTTGGTCCCCA TGGAGGGGAGTGGGGCCAGCCAGCAGAAACAGTGGGCTGTACAACATCACCTTCAAATAT TCGCAGCTGGCTGTGGCCGGCGGGGTCCGGCCGCGCGGGGCGCCGACACCTGTGGC 189 600 621 561 480 501 420 81 660 540 441 360 381 300 321 261 120 240 180 60

1758 GGAGAAATTTGATTCGGGCTTGGTTTTAAATGATGTCATGTGCAAACCAGGGCCTGAGAG 1817 	1638 CCGGTCCCTATACGTCGCCATTTGCAACATGCACCAGTTTATTGACGAGGAGCCCGACTG 1697	580 AGCCGGGGCA-GCACACGCGACAGGGCA-GCAGAAGGAACTACTTCCGGAGCAAGTCAGG 16 	2 ATGGACAATC-TTCCTCAGCTCTGTTCCCAC-CTGCACTCCGAGACCACGGCCTCCAGG 1	81 CTCCGCCAGGCCAAGCAGAGTTCGTCCGCGGCGCTCAGCAAGTTTATCGCCGTCTACTTT 14 62 GATTATTCCTGCGAGGGAGAGTCCCCGGTGCAGTCTAGACTGAGTTCCAAGTACAAGTTCCTAGACTGCAAGTACTACAAGTACAAGTTCCTAGACTGCAAGTACTAGACTGCAAGTACTAGACTGCAAGTACTAGACTGCAAGTACTAAGTACAAGTTCCTAGATTATCCTAAGTACCAAAGTTACAAGTTCCAAGTTACAAGTTCCTAAGTACCAAAGTTCAAGTTCAAGTTACAAGTTCAAGTTACAAGTTCAAGTTCAAGTTACAAGTTCAAGTTCAAGTTAACTAAACTTCAAGTTCAAGTTAACTAAGTTCAAGTTCAAGTTAACTAAGTTCAAGTTAACTAAGTTCAAGTTCAAGTTCAAGTTAACTAAGTTCAAGTTCAAGTTAACTAAGTTCAAG	1342 GGCCGAGGCTCGGGGAAAGGACAGCTCTTCCTGGTGGCGGTGTCAGCCATTGCCGAAAAG 1401	1282 GTTTGTTCCAAAGGTATGAAGTACTTTGTGGACAAGAAGAACTACAAACACAAAGGAGGT 1341 	AGAGAAGGGCAGAGAGAATGGGTCATCCAGAAGATCCACGAGTCCCAGTTCATTGTG 1	CTCCAGGACTTCTGTGGCTGTGAGGTGGCTCTGGACCTGTGGGAAGACTTCAGCCTCTGT 1	TGCTATTCCAGTAAAGATGGCCAGAATCACATGAATGTCGTCCAGTGTTTCGCCTACTTC 1	42 TCCACATACACTGCAGGACTCCCAAGAGAGGCTCCGGCCGG	TGCCGCAAGAAGAACAAGAAAATATATATTCACATTTAGATGAAGAGAGGCTCTGAGTCT 10	ถ—ถ ง ง	862 AAAGTGATTATGCCTTAAAGCCAGTGCACTCCCCGTGGGCCGGCC	802 CAAAATGTTTCTCCAGGGGATTATATAATTGAGCTGGTGGATGACACTAACACAACAAGA 861	661 GCACCGCACAACTTCCGCTTCCGTTTCTTCTATCTTCACTACAAGCTCAAGCACGAAGGA 720 742 CCTTTCAAGCGAAAGACCTGTAAGCAGGAGCAAACTACAGAGACGACCAGCTGCCTCCTT 801
RESULT 6 AAS18134 ID AAS18134 standard; cDNA; 2786 BP.	2701 AGATAATGTTCTCATTTATTTTTGATGTAGAATTTACATTGCCATGGGTGTTAAATAAGC 2778 TTTGAGTCAAAAGTCAAGAAAGTGACTGAATATACAGTCACCTTTTATGAAATGA 2832	658 TTTTAA        641 TTTTAA 718 AGATAA	Qy 2598 CAAACTITGCCTGTTTGCTAITGGCTACCTTGAITTGAAAAGCTTTGTGAAAAAAGGCAC 2657	2538 AATATGTAAAGAAAAACAGGAAGATACCTGCACTAATCATTCAGACTTCATTGAGCTCTG		358 AGTGAA        341 AGTGAA 418 AAACTC	2298 AGCTCATCTCCCTGGTTGCATGGCCCACTTGGAGCTGAGGTCTCATACAAGGATATTTGG	OY 2238 GTAACAAAACGAAAAGFCTAAGCATTGCCACTTTAGCTGCCTCCCTCTGATTCCCC 2297	78	8 TTCAGG	OY 2058 GGAAGGACTCTCGACGGACCAGACAGAAACGTCTTCCCTGACGGAGAGGGTGTCCTCCTC 2117	OY 1998 GCGGGACTCAGGCATCTATGACTCGTCTGTGCCCTCATCCGAGCTGTCTCTGCCACTGAT 2057	OY 1938 TACCGCCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGCAGCCCCTCGGACATGCC 1997	1878 GCACCAGAGTCAGCATGAGCCTGGACCAGACGGGGAGGCCCGGCCTTGCCCTTGACGG	1818 TGACTTCTGCCTAAAGGTAGAGGCGCCTGTTCTTGGGGCAACCGGACCAGCCGACTCCCA 

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Best Local Similarity
Matches 2718; Conserv
                                                                                                                                                                                                                                                                              The invention relates to primate and rodent DNAX cytokine receptor subunit (DCRS) polypeptides and the polypucleotides encoding them. The receptors, or their portions may be useful as phosphate labelling enzymes to label general or specific substrates. The subunits may also be functional immunogens to elicit recognising antibodies, or antigens capable of binding antibodies. A combination, e.g., including a DCRS can be used as an immunogen for the production of antisera or antibodies capable of distinguishing between other cytokine receptor family members. A purified DCRS can also be used as a reagent to detect antibodies generated in response to the presence of elevated levels of expression, or immunological disorders which lead to antibody production to the endogenous receptor. This sequence represents cDNA encoding the human
                                                                                                                                                                                                                                            Sequence 2786 BP; 673 A; 760 C; 709 G; 637 T; 0 U; 7 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 16; Page 21-25; 148pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Isolated antigenic human or mouse DNAX receptor subunit-like polypeptide useful for detecting antibodies generated in response to presence of increased protein levels or immunological disorders.
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  TACAACATCACCTTCAAATATGACAATTIGTACCACCTACTTGAATCCAGTGGGGAAGCAT
                                    CNGGGCGCCGACACCTGTAGCTGGANGGGAGTGGGGCCAGCCAGCAGAAACAGTGGGCTG
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The invention relates to modulating (MI) activity of cell, by contacting CC cell with an agonist or antagonist of DNAX cytokine receptor submit CC (DCRS9) or of interleukin (II)-17C where the cell modulates psoriasis, CC inflammatory bowel disorder (IBD), interstitial lung disorder, asthma or CC allergy, or atherosclerosis. Also provided are methods for treating (M2) ct the disorder which involves administration of the modulator and CC diagnosing (M3) a disorder as mentioned above that involves contacting a CC sample from a test subject with a binding composition that specifically CC binds to a polypeptide or nucleic acid of DCRS9 or IL-17C. (M1) is useful CC for modulating an activity of a cell. (M2) is useful for treating a CC subject suffering from a disorder such as psoriasis, IBD, interstitial CC lung disorder, asthma or allergy, or atherosclerosis, where the CC interstitial lung disorder is idiopathic pulmonary fibrosis, eosinophilic CC granuloma, or hypersensitivity pneumonitis. The IBD is Crohn's disease or colorative colitis. The present sequence represents a human DCRS8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel human interleukin-17 (IL-17) receptor protein, the coding gene and application. The current sequence is that the human interleukin-17 receptor DNA of the invention.
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                                                                                                            GTAGCTTCAAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATTTTGAAACGG
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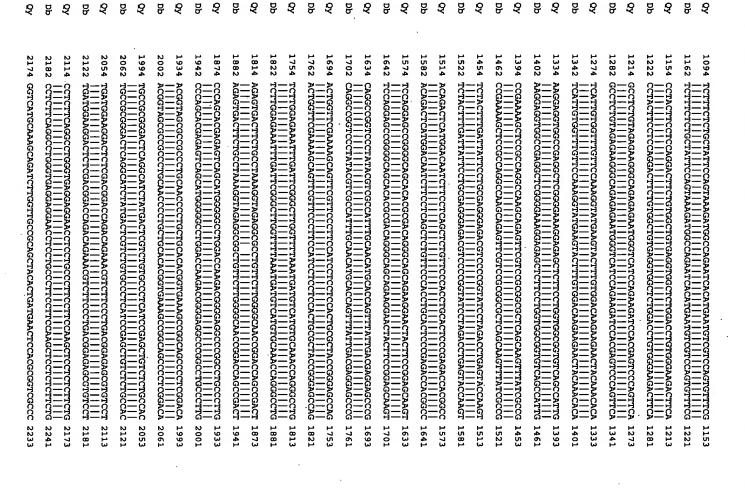
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The invention discloses a polymucleotide comprising a sequence selected CC from 1970 fully defined nucleotide sequences which encode novel CC polypeptides. Also claimed is a polypeptide encoded by the polymucleotide or its partial peptide, an antibody binding to the polypeptide or peptide CC of the polymucleotide, immunologically assaying the polypeptide or peptide CC peptide of the polymucleotide by contacting the polypeptide or peptide CC with the antibody of the encoded protein, and observing the binding CC between the two, a transformant carrying the polymucleotide in an CC expressible manner and an antisense polymucleotide. The oligonucleotide is useful as a primer for synthesising the polymucleotide or as a probe CC for detecting the polymucleotide. The polymucleotide and encoded CC genes may be included in them, for developing a disgnostic marker or CC medicines for regulation of their expression and activity, or as targets CC figure therapy. The genes are involved in tissue and/or cell conscription-related proteins, signal transduction-related proteins, cc transcription-related proteins, disease-related proteins and genes CC encoding them can be used as indicators for diseases (e.g. osteoporosis, cencological diseases, cancer, tumours. The CDNA may be used to regulate the activity or expression of the encoded protein to treat diseases. The sequence presented is a CDNA of the invention. Note: Some of the sequence
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                                                                      TCAGAGCCGTGGCCATCACAGTGCCACTGGTAGTCATATCGGCATTCGCGACGCTCTTCA
                                                                                                                                                                                                                                                                           CAACAAGAAAAGTGATTATGCCTTAAAAGCCAGTGCACTCCCCGTGGGCCGGGCCCA
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Human REMAP-16 cDNA.

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XX Fr Human; receptor and membrane-associated protein; REMAP; arteriosclerosis; cell proliferative disorder; atherosclerosis; polycythaemia vera; cancer; cirrhosis; hepatitis; paroxysmal nocturnal haemoglobinuria; psoriasis; primary thromobocytopaenia; developmental disorder; mental retardation; renal tubular acidosis; neurological disorder; Alzheimer's disease; Parkinson's disease; anaemia; reproductive disorder; autoimmune disorder; infertility; inflammatory disorder; acquired immune deficiency syndrome; ALDS; epilepsy; allergy; asthma; autoimmune thyroiditis; Crohn's disease; contact dermatitis; diabetes mellitus; glomerulonephritis; osteoporosis; Goodpasture's syndrome; gout; Graves' disease; Hashimoto's thyroiditis; irritable bowel syndrome; multiple solerosis; Reiter's syndrome; uveitis; osteopartitis; pancreatitis; rheumatoid arthritis; Sjogren's syndrome; gene therapy; virucide; protozoacide; fungicide; gene; ss.

sapiens.

Location/Qualifiers 512. .2299 /\*tag= a

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                                                                                                                                                                                                                                                       The present invention relates to human receptor and membrane-associated CC proteins (REMAP) and polynucleotides encoding such proteins. Sequences of the invention are useful for diagnosing, treating or preventing disorders CC associated with aberrant expression of REMAP, particularly cell (proliferative disorders (e.g. arteriosclerosis, atherosclerosis, CC cirrhosis, hepatitis, paroxysmal nocturnal haemoglobinuria, polycythaemia CC vera, psoriasis, primary thromobocytopaenia or cancer), developmental CC disorders (e.g. renal tubular acidosis, anaemia or mental retardation), CC neurological disorders (e.g. Alzheimer's disease, Parkinson's disease or CC repliepsy), reproductive disorders (e.g. infertility or a disruption in CC the menstrual cycle) or autoimmune/inflammatory disorders (e.g. AIDS, CC allergies, asthma, autoimmune thyroiditis, contact dermatitis, Crohn's CC disease, disease, Hashimoto's thyroiditis, irritable bowel syndrome, cC gout, Graves' disease, Hashimoto's thyroiditis, pancreatitis, Reiter's syndrome, rehumatoid arthritis, Soogren's syndrome, uvertis) or vital, bacterial, fungal, parasitic, protozoan or helminthic infections. They care also useful in gene therapy. The present sequence is human REMAP-16
                                                                                                                                                                                              Matches 2624;
                                                                                                                                                                                                          Query Match
Best Local Similarity
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21-JUN-2001;
22-JUN-2001;
28-JUN-2001;
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                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human receptors and membrane-associated proteins and nucleic acids, ful for diagnosing, treating or preventing inflammatory disorder, e.s., allergy or anemia, multiple sclerosis, osteoarthritis, cancer or
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                                                                                                                                 ATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACGCCCAGAATATCA
                               CCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGCTGAAGTCGGAGG
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; 2001US-0300495P.
; 2001US-0301992P.
; 2001US-0340542P.
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                                           GCCAGGCCAAGCAGAGTTCGTCCGCGCGCGCTCAGCAAGTTTATCGCCGGTCTACTTTGATT
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AAGAAAAACAGGAAGATACCTGCACTAATCATTCAGACTTCATTGAGCTCTGCAAACTTT
                                                                                                                                  CAATTTTCTAAAATGATATGGAGCTCTGAAAGGCATGTCCATAAGGTCTGACAACAGCTT
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                                                                   TCCCTGGTTGCATGGCCCACTTGGAGCTGAGGTCTCATACAAGGATATTTGGAGTGAAAT
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ABZ11243 standard; cDNA; 3948

ABZ11243

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polynucleotide SEQ ID NO 125.

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XX Human; genome mapping; gene therapy; food supplement; virus; fungus; cell-proliferative disorder; neurodegenerative disease; bacterial; parkinson's disease; Alzheimer's disease; autoimmune disease; multiple sclerosis; diabetes; genetic disorder; wound; burn; infection; arthritis; cytostatic; immunomodulator; nootropic; neuroprotective; antiparkinsonian; antidiabetic; immunosuppressive; dermatological; haemostatic; vulnerary; fungicide; antibacterial; virucide; protozoacide antiarthritic; gene; 88. protozoacide;

sapiens.

WO200270539-A2

12-SEP-2002

05-MAR-2002; 2002WO-US005095

05-MAR-2001; 2001US-00799451

(HYSE-)

Xue AJ, Yang Y, I Goodrich RW, Asundi V, Zh Ma Y, Yamazaki V, Chen R, J, Wang D, Drmanac RT; Zhang J, R, Wang i Ņ Zhao QA, Ghosh I 3 Ren Ţ,

2002-759812/82. ABP69026

New polynucleotides comprising sequences assembled from expressed sequence tags (ESTs), useful for treating cell-proliferative, neurodegenerative, autoimmune, genetic, myeloid or lymphoid, or p coagulation disorders.

SEQ ID NO 1012pp + Sequence Listing; English

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The invention relates to an isolated polynucleotide (I) comprising a nucleotide sequence selected from any of 948 sequences (ABZ11119-ABZ12066) or their mature protein coding portion, active domain coding protein or complementary sequences. The polynucleotides are useful for identifying expressed genes or for physical mapping of human genome. The encoded polypeptides (ABP68902-ABP68949) are useful as molecular weight markers, as a food supplement, for generating antibodies, in medical imaging, screening and diagnostic assays and for treating cell-proliferative disorders (cancer), neurodegenerative diseases (Parkinson)

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Matches 2430; Conserv
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05-MAR-2002;
20-AUG-2002;
                                                               New isolated arginine-rich protein-like polynucleotides and polypeptides, useful for diagnosing and/or treating conditions associated with aberrant activity of the arginine-rich polypeptides, such as cancer and inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ss; gene; human; arginine-rich genetic disorder.
                          Disclosure; SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3948 BP; 1013 A; 938 C; 975 G;
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This invention describes novel polynucleotides and polypeptides isolated from human cDNA libraries which can be used for gene therapy or in vaccines. The polynucleotides of the invention and antibodies encoded by them may be used in the prevention, diagnosis and treatment of diseases

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Best Local Similarity
Matches 2313; Conserv
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The invention relates to an isolated cytokine receptor polypeptide designated Zcytor18. The Zcytor18 polypeptides can be expressed by standard recombinant methodology. The polypeptides can be used to inhibit cell proliferation associated with psoriasis or tumour growth. The encoding nucleic acids are useful for providing Zcytor18 in vivo by gene therapy techniques. Zcytor18 oligonucleotide probes are useful for in vivo diagnosis, and the Zcytor18 probes and primers can be used to detect
                                                                                                                                                                                                                                                                                                                                                                                                                                        Cytokine receptor; Zcytor18; cell proliferation; antipsoriatic; human; pulmonary alveolar proteinosis; familial periodic fever; antitumour; erythroleukemia; chromosome 3p14.3; gene therapy; splice variant; ds.
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                                                                                                                      New cytokine receptor polypeptide designated zcytor18, useful for inhibiting cell proliferation associated with psoriasis or tumor growth, and modulating immune system by binding to endogenous zcytor18 ligand.
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The invention relates to an isolated cytokine receptor polypeptide designated Zcytor18. The Zcytor18 polypeptides can be expressed by standard recombinant methodology. The polypeptides can be used to inhibit cell proliferation associated with psoriasis or tumour growth. The encoding nucleic acids are useful for providing Zcytor18 in vivo by gene therapy techniques. Zcytor18 oligonucleotide probes are useful for in vivo diagnosis, and the Zcytor18 probes and primers can be used to detect and localize Zcytor18 gene expression in tissue samples. The probes are also useful for detecting gross aberrations in chromosome 3 in which Zcytor18 gene resides. The Zcytor18 polynucleotides can also be used in

New cytokine receptor polypeptide designated zcytor18, useful for inhibiting cell proliferation associated with psoriasis or tumor growth, and modulating immune system by binding to endogenous zcytor18 ligand.

Claim

5; Page 85-90; 119pp; English.

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Query Match
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Matches 2271; Conserv
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                                       GACTTCTGCCTAAAGGTAGAGGCGCCTGTTCTTGGGGCAACCGGACCAGCCGACTCCCAG
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GénCore version 5.1.7
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BD147377 Primer fo AX867315 Sequence	BC094998 Danio rer	5	AF401232 Danio rer	AF364103 Danio rer	AC125152 Mus muscu	AC119550 Rattus no	CT025426 Xenopus t	AC092050 Homo sapi	AC097358 Homo sapi	AJ508679 Gallus ga	AY278204 Gallus ga	AF424804 Mus muscu	AF494209 Mus muscu		CQ718300 Sequence				AX364578 Sequence	AF494210 Mus muscu	AX364580 Seguence	AF459444 Mus muscu	AY358774 Homo sapi	AX180780 Sequence	AR338364 Sequence

## ALIGNMENTS

ORIGIN	CDS	AUTHORS TITLE JOURNAL FEATURES SOURCE	SOURCE ORGANISM REFERENCE	RESULT 1 AX251723 LOCUS DEFINITION ACCESSION VERSION
/note="unnamed_protein_product" /codon_start=1 /protein_id="CAC93798.1" /protein_id="CAC93798.1" /protein_id="CAC93798.1" /b_xref="GI:15985082" /translation="MAPMIQLCSVFFTVNACLNGSQLAVAAGGSGRAMGVDTCGWRGV /translation="MAPMIQLCSVFFTVNACLNGSQLAVAAGGSGRAMGVDTCGWRGV /translation="MAPMIQLCSVFFTVNACLNGSQLAVAAGGSGRAMGVDTCGWRGV /translation="MAPMIQLCSVFFTVNACLNGSGNACHDQVAVTILWSPGA LGIEFLKGFRVILLELKSEGRQCQQLILKDPKQLNSFKRTGMESQPFLNMKFETDYF VKVVPFPSIKNSSNYHPFFRTRACDLLLQPDNLACKPFWKPRNINISQHGSDNQVSF UKVVPFPSIKNSSNYHPFFRTRACDLLLQPDNLACKPFWKPRNINISQHGSDNQVSF DHAPHNGFRFFFYLHYLKHEGFFRKRTCKORQTTFTSTSCLQNVSGOYIIELVDDT NTTRKVMHYALKFVHSFWAGFILAMAITVPLVVISAFATLFTWKCRKKQQENIYSHLD EBSSESSTYTAALFRENKVFLCYSSKDGQNHMNVVQCFAYFLQDFCGCEVALD LWEDFSLCREGQREWVIQKIHESQFIIVCSKGMKYFVDKKNVKHKGGGRGSGKGELF LVAVSALAKKLRQAKGSSSAALSKFIAVYFDYSCEGDVPGILDLSTKYRLMDNLPQLC SHLHSNDHGLQEFGQHTRQGSRRNYFRSKSGRSLYJALCNMHQFIDEEDWFEKQFVP FHPPPLAYRESALGPLAGSSAALGFLHTVYKAGSPESDMFRDSGIYDSSVFSSELSLFJHMEGL GGLDQDGERARPALDGSAALQFLHTTVKAGSPESDMFRDSGIYDSSVFSSELSLFJHMEGL STDQTETSSLTESVSSSGLGEEEPPALPSKILSSGSCKADLGCRSYTDELHAVAP"	/organism="Homo sapiens" /mol type="unassigned DNA" /db.xref="taxon:9606" 22>2235	Jing.S. Il-17 receptor like molecules and uses thereof Patent: WO 016859-A 1 20-SEP-2001; Amgen Inc. (US) Location/Qualifiers 13083	Homo sapiens (human) Homo sapiens Homo sapiens Sukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.	AX251723 3083 bp DNA linear PAT 05-OCT-2001 Sequence 1 from Patent WO0168859. AX251723 AX251723.1 GI:15985081

2041 CTGTCTCTGCCACTGATGGAAGGACTCTCGACGGACCAGACAGA	Q B Q	961 GCGACGCTCTTCACTGTGATGTGCCGCAAGAAGCAACAAGAAAATATATAT	, Db
	ОУ	901 TGGGCCGGGCCCATCAGAGCCATGGCCATCACAGTGCCACTGGTAGTCATATCGGCATTC 960	g 8
GGCCTGCCCTTGACGGTAGCGCCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGCGGCGCCGCCCTGCACACCGCTGCACACGGTGAAAGCCGGC	B 8	841 GATGACACTAACACAAGAAAAGTGATGCATTATGCCTTAAAGCCAGTGCACTCCCCG 900	B &
GSACCAGCCGACTCCCAGCACGAGGTCAGCATGGGGGGCCTGGACCAAGACGGGGAGGCC	) B S	781 GAGACGACCAGCTGCCTCCAAAATGTTTCTCCAGGGGATTATATATA	B 8
AAACCAGGGCCTGAGAGTGACTTCTGCCTAAAGGTAGAGGCCCTGTTCTTGGGGCAACC	) B &	721 TACAAGCTCAAGCACGAAGGACCTTTCAAGCGAAAGACCTGTAAGCAAGGAGCAAACTACA 780 	B &
TACCGGGAGCCAGTCTTGGAGAAATTTGATTCGGGCTTGGTTTTAAATGATGTCATGTGCTTTGATTCAGGGAGAAATTTGATTCGGGCTTTGGTTTTAAATGATGTCATGTGCTAGTGTAAATGATGTCATGTGCTAGGGAGAAATTTGATTCGGGCTTTGGTTTTAAATGATGTCATGTGCTAGTGCTAGGTGAGAAATTTGATTCGGGCTTTGGTTTTAAATGATGTCATGTGCTAGTGCTAGGTGGTAGAAATTTGATTCGGGCTTTGGTTTTAAATGATGTCATGTGCTAGGTGGTAGAAATTTGATTGCAGGAGAAATTTGATTCGGGCTTTGGTTTTAAATGATGTCATGTGCTAGAGAAATTTGATTTGATTGA	рь су.	661 ATGCAGGTGTCCTTCGACCACGCACCACCACAACTTCGGCTTCCGGTTTCTTCTATCTTCAC 720	DB Qy
GACGAGGAGCCCGACTGGTTCGAAAAAGCAGTTCGTTCCCATCCTCCTCCACTGCGC	D Q	601 CTAGCTTGTAAACCCTTCTGGAAGCCTCGGAACCTGAACATCAGCCAGC	Ωу
II CCOSNCCANG CANGUCUSI CCCIATACGI CGCCATTIGCANCAIGUNCCANGII IAILIIII IIII IIIII IIIII IIIII IIIII IIIII IIII	) B &	541 AATTACCACCCTTTCTTTAGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAAT 600	B 8
CGAGACCACGGCCTCCAGGAGCCGGGCAGCACAGGCGACAGGAGCAGCAGGACTAC	) B &	481 AAATTTGAAACGAATTATTTCGTAAAAGGTTGTCCCTTTCCTTCC	B &
CTGAGTACCAAGTACAGACTCATGGACAATCTTCCTCAGCTCTGTTCCCACCTGCACTCC	, p &	421 AAGCAGCTCAACAGTAGCTTCAAAAGAACTGGAATGGAA	Qy db
AMOSTIFIA COCCOS CIACITISMIAITIC CISCAMASMASMOSIC COCCOSTATOCIAMAC I	ם מ	361 ATACTGGAGGAGTGAAGTCGGAGGGAAGAAGTGCCAACAACTGATTCTAAAGGATCCG 420	Qу
GIGITAGECATITECTESAAAAGETICGECGAGECGAGECGAGECGAGECGGGGGGGGGGGGGGG	; B &	301 GTCACCATTCTTTGGTCCCCAGGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTA 360	Db Qy
ARCIACHARACACHANAGAIGGECGAGGEICGGGGAAAGGAAGGEICIICCGGGGGAAAGGAAGGEICAICCIGGIGGGGGAAAGGAAGGAGAGGCTCTTCCTGGTTGGGGAAAGGAAAGGAGAAAGGAAAAGGAAAAGGAAAAGGAAAA	g b s	241 GTGATTGCTGACGCCCAGAATATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCA 300	B &
GNGICCCAGIICAICAIIGIGGIIIGIIIIGIA COMMOGIA GANGACIIIGIGGACAAAAAAAAAAAAAAAAAAAAAAAAA	) b 4	181 TACAACATCACCTTCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCAT 240 	g Qy
TOGGAAGACTICAGCCTCTGTAGAAGAAGGGCAGAAGAATGGGTCATCCAGAAGATCCAC	? B 4	121 TGGGGCGTCGACACCTGTGGCTGGAGGGGAGTGGGGCCAGCCA	dg VQ
	? B 4	61 GTCAACGCCTGCCTCAACGGCTCGCAGCTGGCCGCTGGCCGCGTCCGGCCGCGCGCG	Qy dt
	; B ;	1 TGGCTGGGCGAGCGCACGGCCATGGCCCCGTGGCTGCAGCTCTGCTCCGTCTTTTACG 60	р <i>8</i>
1021 GATGAAGAGAGCTCTGAGTCTTCCACATACACTGCAGGACTCCCCAAGAGAGAG	S B S	Query Match 100.0%; Score 3083; DB 6; Length 3083; Best Local Similarity 100.0%; Pred. No. 0; Matches 3083; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Qu Be Ma

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AP494208 4477 bp mRNA linear PRI 08-1 Homo sapiens interleukin 17 receptor-like protein long form (IL17RLM) mRNA, complete cds; alternatively spliced.
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Xiong, S.Q., Huang, G.R., i
Chen, Y., Liu, L., Fu, X.Y.
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  TACAACATCACCTTCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCAT 240
                                                             TGGCTGGGCGAGCGCCATGGCCCCGTGGCTGCAGCTCTGCTCCGTCTTTACG
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GGLDQDGEARPALDGSAALQPLLHTVKAGSPSDMPRDSGIYDSSVPSSELSLPLMEGL
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DHAPHNFGFRFYLHYKLKHEGPFKRKTCEQEQTTEMTSCLLQNVSPCDY I I ELVDDT
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GPASRNSGLYNITFKYDNCTTYLNPVGKHVIADAQNITISQYACHDQVAVTILWSPGA
LGIEFLKGFRVILEELKSEGRQCQQLILKDPKQLNSSFKRTGMESQPFLAMKFETDYF
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/protein_id="AAM74077.1"
/db_xref="GI:21667504"
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domain; similar to sef; hIL-17RLM-L; alternatively
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/mol_type="mRNA"
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CIGITCTICTGCCACTGATGGAAGGACTCTCGACGGACCAGACAGACGTCTTCCCTGACG 210	B 5	ACAAGAAAATATATATTCACATTTA 1020 	961 GCGACGCTCTTCACTGTGATGTGCCGCAAGAAGCAACAAGAAAATATATAT	Qy db
AGCCCCTCGGACATGCCGCGGGACTCAGCATCTATGTCCTGTGCCCTCATCCGAG 204	, B &	GCCACTGGTAGTCATATCGGCATTC 960            GCCACTGGTAGTCATATCGGCATTC 1028	901 TGGGCCGGGCCCATCAGAGCCATGGCCATCACAGTGCCACTGGTAGTCATATCGGCATTC	Qy Db
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CGAGACCACGGCCTCCAGGAGCCGGGGCAGCACCACGCGACAGGGCAGCAACTAC	y da	TTTTCCTTCCATTAAAAACGAAAGC 540	481 AAATTTGAAACGGATTATTTCGTAAAGGTTGTCCCTTTTCCTTCC	D 64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Butheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
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Sequence 15 from Patent EP1529843.
CS083243
CS083243.1 GI:66349785
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REFERENCE 1 AUTHORS Edmonds, B.T., Micanovic, R., Ou, W., Su, B.W., Tschang, S.H. and Wang, H. Wang, H. Wang, H. Navel secreted profesing and their uses	1938 TAGCGCCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGCAGCCCCTCGGACATGCC 1997
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Patent: WO 2005065711-A 9 21-JUL-2005;
Schering Corporation (US)
Location/Qualifiers
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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GTCACCATTCTTTGGTCCCCAGGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTA
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  GTCAACGCCTGCCTCAACGGCTCGCAGCTGGCTGTGGCCGCTGGCGGGTCCGGCCGCGCG
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Homo sapiens interleukin 17 receptor-like protein short (IL17RLM) mRNA, complete cds; alternatively spliced.
AF494211
                                                                                                                                                                                                                                 Submitted (22-MAR-2002) Tsinghua Institute of Genome Research, Department of Biological Sciences and Biotechnology, and School of Medicine, Tsinghua University, Beljing 100084, P.R. China
                                                                                                                                                                                                                                                                                 Liu, L., Fu, X. and
Direct Submission
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Xiong,S., Zhao,Q., Huang
Liu,L., Fu,X. and Chang,
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J. Biol. Chem. 278 (50),
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Xiong,S., Zhao,Q., Rong,Z., Huang,G., Huang,Y., Chen,P.,
Liu,L. and Chang,Z.
hSef Inhibits PC-12 Cell Differentiation by Interfering
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                          /gene="IL17RLM"
/note="contains a putative TIR domain and SH3 interaction domain; similar to sef; hIL-17RLM-S; alternatively
                                                                                                                      1. .4478
                                                                                                                                              /organism="Homo Bapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="3"
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VCSKCHXYFUDKKYYKHKGGGRGSGKGELFLVAVSAIAEKLRQAKQSSSAALSKFIAV
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Unpublished 2 (bases 1 to 2724) Gilbert, J.M. and Gorman, D.M.
                        Hominidae; Homo.

1 (bases 1 to 2724)

Gilbert, J.M. and Gorman,

Identification of novel
                                                                            Homo sapiens (human)
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                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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          AGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAATCTAGCTTGTAAACCCCTTCTGG
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Direct Submission
Submitted (13-DEC-2001) Genomics, DNAX Research
California Ave., Palo Alto, CA 94304, USA
Location/Qualifiers
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Query Match
Best Local Similarity 99.7
Matches 2716; Conservative AAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATTTGAAACGGATTATTTC GGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGCTGAAGTCG ATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCAGTCACCATTCTTTGGTCCCCA GACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACGCCCAGAAT GACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACGCCCAGAAT TGGAGGGGAGTGGGGCCAGCAGAAAACAGTGGGCTGTACAACATCACCTTCAAATAT rcgcagctggctgtcgccgctggcggtccgccgcgcgtgggcgtcgacacctgtggc AGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAATCTAGCTTGTAAACCCCTTCTGG ATCACCATCAGCCAGTATGCCTTGCCATGACCAAGTGGCAGTCACCATTCTTTGGTCCCCA TGGAGGGGAGTGGGGCCAGCCAGCAGAAACAGTGGGCTGTACAACATCACCTTCAAATAT 86.9**%;** 99.7**%**; pred. No. 0; 0; Mismatches 멺 8 5 Length u • Gaps 321 621 561 480 600 540 501 420 441 360 381 300 261 201 141 60 .81 240 180 120

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2719 GATAANGTTCTCATTTATTTTGA 2742	dg VQ	1642 TCCCTATACGTCGCCATTTGCAACATGCACCAGTTTATTGACGAGGAGCCGACTGGTTC 1701	g &
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AACATCATAGCCACAGAAAATCAAGT-GCCAGTCTATCT-GGAATCCATGTT-GTATTGCA	₹ B £	1522 ATGGACAATCTTCCTCAGCTCTGTTCCCACCTGCACTCCCGAGACCACGGCCTCCAGGAG 1581	B 8
2512 IGLAMBANAMACAGGAMGH ACC IGCACLAHICHI ICAGNCIICHI IGGGCIC IGCAMA 2011	S & S	1462 GATTATTCCTGCGAGGGAGACGTCCCCGGTATCCTAGACCTGAGTACCAAGTACAGACTC 1521	Qy db
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	D &	682 GCACCGCACAACTTCGGCTTCCGTTTCTTCTATCTTCACCAAGCTCAAGCACGAAGGA 741	B 8
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734 ACGAAGGACCTTTCAAGCGAAAGACCTGTAAGCAGGAGCAAACTACAGAGACGACCAGCT 793	674 TOGACCACGCACGCACAACTTCGGCTTCCGTTTCTTCTATCTTCACTACAAGCTCAAGC 733	614 CCTTCTGGAAGCCTCGGAACCTGAACATCAGCCAGCATGGCTCGGACATGCAGGTGTCCT 673	554 TCTTCTTTAGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAATCTAGCTTGTAAAC 613	494 ATTATTTCGTAAAGGTTGTCCCTTTTCCTTCCATTAAAAACGAAAGCAATTACCACCCTT 553 	434 GTAGCTTCAAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATTTGAAACGG 493 	374 TGAAGTCGGAGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGAAGCAGCTCAACA 433 	314 GGTCCCCAGGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAGC 373	254 CCCAGAATATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCAGTCACCATTCTTT 313	194 TCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACG 253 	134 CCTGTGGCTGGAGGGGAGTGGGGCCAGCCAGCAGAAACAGTGGGCTGTACAACATCACCT 193	y Match Local Similarity 99.7%; Pred. No. 0; hes 2684; Conservative 0; Mismatches 9; Indels 0; Gaps 0;	/organism="Homo sapiens" /mol_type="mRNA" /db_xref="taxon:9606"		A sequences 1459-A 1429 07-MAY-2003;	Isogal,T., Suglyama,T., Otsuki,T., Wakamateu,A., Sato,H., Ishii,S., Yamamoto,J.I., Isono,Y., Hio,Y., Otsuka,K., Nagai,K., Irie,R., Tamechika,I., Seki,N., Yoshikawa,T., Otsuka,M., Nagahari,K. and		Homo sapiens (human) Homo sapiens Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammaila: Rutheria: Ruarchontoglires: Drimates: Catagorhini.	<u>ا</u> و	AX.'4'/904 2894 DD MXNA IINGAT PAT 20-JUN-2003 Sequence 1429 from Patent EP1308459. AX747904	3000 5
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AK093074
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oligo capping; fis (full insert
                                                                     AK093074
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                                                                                                                                                                                                 AL Unpublished

28 (bases 1 to 2894)

28 (bases 1 to 2894)

28 Isogai, T. and Yamamoto, J.

28 Isogai, T. and Yamamoto, J.

28 Isogai, T. and Yamamoto, J.

29 Project (HRI Team); 2-6-7

20 Razusa-Kamatari, Kisarazu, Chiba 292-0812, Japan

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NEDO human cDNA sequencing project supported by Ministry of

Economy, Trade and Industry of Japan, CDNA full insert sequencing:

Research Association for Biotechnology (RAB); cDNA library

construction: Helix Research Institute (HRI) (supported by Japan

Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB,

HRI, and Biotechnology Center, National Institute of Technology and

Evaluation; clone selection for full insert sequencing: HRI and

RAB; annotation: HRI and RAB.
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Strauberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,

Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,

Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,

Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,

Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,

Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,

Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,

Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,

MocKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,

Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.M.,

Villalon, D.K., Muzny, D.M., Sodergren, B.J., Lu, X., Gibbs, R.A.,

Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,

Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, B.D.,

Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,

Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,

Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
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4490 bp mRNA linear PRI 30-MAR-2005
Homo sapiens interleukin 17 receptor D, mRNA (cDNA clone MGC:42862
IMAGE:4830807), complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ត្តិ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BC038369.1 GI:23512250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCACTTTTAACATCATAGCCCACAGAAATCAAGTGCCAGTCTATCTGGAATCCATGTTGTA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGACAACAGCTTGCCAAATTTGGTTAGTCCTTGGATCAGAGCCTGTTGTGGGAGGTAGGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NGCTTTGAGTCAAAAGTCAAGAAAGTGACTGAATATACAGTCACCTTTTATG 2894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTTGAGTCAAAAGTCAAGAAAGTGACTGAATATACAGTCACCTTTTATG 2826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCACTTTTAACATCATAGCCACAGAAATCAAGTGCCAGTCTATCTGGAATCCATGTTGTA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGCAAACTTTGCCTGTTTGCCTATTGGCTACCTTGATTTGAAAATGCTTTTGTGAAAAAAAG
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COMMENT
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Submitted (01-OCT-2002) National Institutes of Health, Mammalian Gene Collection (MCC), Bethesda, MD 20892-2590, USA
NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINI. at: http://image.llnl.gov Series: IRAK Plate: 72 Row: h Column: 6
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 24308146.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Web site: http://www.hgsc.bcm.tmc.edu/cdna/
Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcia, A.M., Lu, X., Hulyk, S.W., Loulseged, H.,
Kowis, C.R., Sneed, A.J., Martin, R.G., Muzny, D.M., Nanavati,
A.N., Gibbs, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA Library Preparation: Michael J. Brownstein (NHGRI) & Toshiyuki and Piero Carminci (RIKEN) CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Baylor College of Medicine Human Genom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammalian Gene Collection Program Team Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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L-17RD, SEF"
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          86.8%;
       Score 2675.2;
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Qy 11	Qy 1094 Db 1184	Qy 1034 Db 1124	Oy 974 Db 1064	Qy 914 Db 1004	Qy 85	Qy 79 Db 88	Qy 73 Db 82	Qy 6 Db 7	Qy 6	Qy 5	Qy 4 Db . 5	Qy 4 Db 5	Qy 3	Oy 3	Qy 25 Db 34	Qy 1 Db 2	Оу 1 Db 2	Best Loca Matches 2
154 CCTACTTCCT	н—н	4 4	0-0		4 4	4 GCCTC	4 4 4—4	674 TCGACCACGC	614 CCTTCTGGAAC	554 TCTTCTTTAG	94 ATTATTTCGT	34 GTAGCTTCAA           24 GTAGCTTCAA	374 TGAÁGTCGGA          464 TGAAGTCGGA	314 GGTCCCCAGGG	0-0	94 TCAAATATGA	134 CCTGTGGCTGG	1;
CAGGACTTCTGTGG	TATTCCAGTAAAGA            TATTCCAGTAAAGA	ACATACACTGCAGO	TGTGATGTGCCGCAAGAAGĆAACAAGAAAATATATATT 	GCCATCACAGTGCC             GCCATCACAGTGCC	GTGATGCATTATGC	MATGTTTCTCCAGG	TTCAAGCGAAAGAC	CCGCACAACTTCGG	CCTCGGAACCTGAA	ACCCGAGCCTGTGA            ACCCGAGCCTGTGA	WAAGGTTGTCCCTTT	AGAACTGGAATGGA             AGAACTGGAATGGA	;GGAAGACAGTGCCA            GGAAGACAGTGCCA	GCCCTCGGCATCGA             GCCCTCGGCATCGA	ACCATCAGCCAGTA	AATTGTACCACCTA	ccrereccregaededaerededec	y 99.7%; Pred.
CCTACTTCCTCCAGGACTTCTGTGGCTGTGAGGTGGCTCTGGACCTGTGGGAAGACTTCA	CTTTCTCTGCTATTCCAGTAAAGATGGCCAGAATCACATGAATGTCGTCCAGTGTTTCG	CTGAGTCTTCCACATACACTGCAGCACTCCCAAGAGAGAG	ngaaaatatatatt(             	CAGAGCCATGGCCATCACAGTGCCACTGGTAGTCATATCGGCATTCG	CARCARGARARGEGATGCATTATGCCTTARAGCCAGTGCACTCCCCGTGGGCCGGGCC	CTTCAAAATGTTTCTCCAGGGGATTATATAATTGAGCTGGTGGATGACACTAACA	CGAAGGACCTTTCAAGCGAAAGACCTGTAAGCAGAGCAAACTACAGAGACGACCAGCT 	TCGACCACGCACCACAACTTCGGCTTCCGTTTCTTCTATCTTCACTACAAGCTCAAG 	CTTCTGGAAGCCTCGGAACCTGAACATCAGCCAGCATGGCTCGGACATGCAGGTGTCCT	TCTTCTTTAGAACCCGAGCCTGTGACCTGTTACAGCCGGACAATCTAGCTTGTAAAC	ATTATTTCGTAAAGGTTGTCCCTTTTCCTTCCATTAAAAACGAAAGCAATTACCACCCTT 	GTAGCTTCAAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATTTGAAACGG 	TGAÁCTCGGAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGAAGCAGCTCAACA 	GGTCCCCAGGGGCCCTCGGCATCGAATTCCTGAAAGGATTTCGGGTAATACTGGAGGAG 	CCAGAATATCACCATCAGCCAGTATGCTTGCCATGACCAAGTGGCAGTCACCATTCTTT	TCAAATATGACAATTGTACCACCTACTTGAATCCAGTGGGGAAGCATGTGATTGCTGACG 	CTGTGGCTGGAGGGAGTGGGGCCAGCAGCAGAAACAGTGGGCTGTACAACATCACC 	Pred. No. 0; ; Mismatches 8;
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ACTTCA 1213	GTTTCG 1153       GTTTCG 1243	3CGGCCGAAGG 1093           3CGGCCGAAGG 1183	경=경		GGCCCA 913        GGCCCA 1003	CTAACA 853       CTAACA 943	CCAGCT 793        CCAGCT 883	TCAAGC 733        CAAGC 823	TGTCCT 673	GTAAAC 613        GTAAAC 703	ACCCTT 553       ACCCTT 643	AAACGG 493       AAACGG 583	TCAACA 433        TCAACA 523	AGGAGC 373        AGGAGC 463	TTCTTT 313       TTCTTT 403	CTGACG 253        CTGACG 343	TCACCT 193	
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2324	2174	2204	2054	1994 2084	1934 2024	1964	1904	1754	1694	1634 1724	1664	1604	1 15 4 4 4 4 4	1484	1424	1364 1334	1304 1274	1244 1214
2324	2174	2204	2054	1994 2084	1934 2024	1964	1904	1754	1694	1634 1724	1664	1604	1 15 4 4 4 4 4	1484	1424	1364 1334	1304 1274	1244 1214
2324	2174	2204	2054	1994 2084	1934 2024	1964	1904	1754	1694	1634 1724	1664	1604	1 15 4 4 4 4 4	1484	1424	1364 1334	1304 1274	1244 1214
2324	2174	2204	2054	1994 2084	1934 2024	1964	1904	1754	1694	1634 1724	1664	1604	1 15 4 4 4 4 4	1484	1424	1364 1334	1304 1274	1244 1214
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QY 517 TTTCCTTCCATTAAAAACGAAAGCAATTACCACCCTTTCTTCTTTAGAACCCGAGCCTGT 576	Oy 457 GAATCTCAACCTTTCCTGAATATGAAATTTGAAACGGATTATTTCGTAAAGGTTGTCCCT 516	Oy 397 CAACAACTGATTCTAAAGGATCCGAAGCAGCTCAACAGTAGCTTCAAAAGAACTGGAATG 456	Query Match 78.7%; Score 2426.4; DB 6; Length 3948; Best Local Similarity 99.8%; Pred. No. 0; Matches 2430; Conservative 0; Mismatches 6; Indels 0; Gaps 0;	rce		NCE NISM	GI:56580745	AR577949	Db 2864 TAAGCTTTGAGTCAAAAGTCAAGAAAGTGACTGAATATACAGTCACCTTTTATGAAATGA 2923	2713 ATTGCAGATAATGTTCTCATTTATTTTTGATGTAGAATTTACATTGCCATGGTGTTAAA	2744 GCACTITTAACATCATAGCCACAGAAATCAAGTGCCAGTCTATCTGGAATCCATGTTGT 2	2593 CTCTGCAAACTTTGCCTGTTTGCTATTGGCTACCTTGAATTGAAAAGCTTTGTGAAAAAA	2533 GAGGAAATATGTAAAGAAAAACAGGAAGATACCTGCACTAATCATTCAGACTTCACACTTGAG	73 CTGACAACAGCTTGCCAAATTTGGTTAGTCCTTGGATCAGAGCCTGTTGTGGGAGGTAGG	2413 TUGACAAACTCICCAATTITCTAAAATGATGGGGGTCTGAAAGGCATGTCCATAAGGT 247	2444 TTTGGAGTGAAATGCTGGCCAGTACTTGTTCTCCCTTGCCCCAACCCTTTACCGGATATC	2293 TCCCCAGCTCATCTCCCCTGGTTGCATGGCCCACTTGGAGCTGAGGTCTCATACAAGGATA
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Human dna sequences

L Patent: WO 0112659-A 616 22-FEB-2001;

German Human Genome Project (DE)

Location/Qualifiers

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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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1034 926	975 TGTGATGTGCCGCAAGAAGCAACAAGAAAATATATATTCACATTTAGATGAAGAGAGCTC
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914 806	855 AACAAGAAAAGTGATGCATTATGCCTTAAAGCCAGTGGACTCCCCGTGGGCCGGGCCCAT
854 746	795 CCTCCTTCAAAATGTTTCTCCAGGGGATTATATAATTGAGCTGGTGGATGACACTAACAC
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RESULT 14
HSM801374
LOCUS
DEFINITION
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KEYWORDS
SOURCE
ORGANISM REFERENCE AUTHORS TITLE JOURNAL Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominidae; Homo.
1 (bases 1 to 3863)
Bloecker, H., Boecher, M., Brandt, P., Mewes, H.W., Gassenhuber, J. and HSM801374 3863 bp mRNA linear PRI 18-FEB-2000 Homo sapiens mRNA; cDNA DKFZp434N1928 (from clone DKFZp434N1928). AL133097 1 GI:6453551

Gassenhuber, J. and

Direct Submission

Submitted (15-NOV-1999) MIPS, Am Klopferspitz 18a, D-82152

Submitted (55-NOV-1999) MIPS, Am Klopferspitz 18a, D-82152

Martinsried, GERMANY

Clone from S. Wiemann, Molecular Genome Analysis, German Cancer Research Center (DKPZ); Email s.wiemann@dkfz-heidelberg.de; sequenced by GBF (National Research Centre for Biotechnology Ltd., sequenced by GBF (National Research Centre for Biotechnology Ltd., sequenced by GBF (National Research Centre for Biotechnology Ltd., sequenced by GBF (National Research Centre for Biotechnology Ltd., for the CDNA sequencing consortium of the German Genome Project.

This clone (DKFZp43NN1928) is available at the RZPD in Berlin. Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059

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                                                                                                                                                                                                                                                                                                                                                                                                                             CACCCTTTCTTTTAGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAATCTAGCT
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DH10B; sites NotI + SalI"
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Pred. No. 0;
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Sequence 7 from Patent WO0208259.
AX364576
AX364576.1 GI:18696536
                     Human cytokine receptor Patent: WO 0208259-A 7 31-JAN-2002;
                                                                                                                 Homo sapiens (human)
Homo sapiens
ZymoGenetics, Inc. (US)
Location/Qualifiers
                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Euarchontoglires; Primates; Cata
                                                    Presnell, S.R., Kuestner, R.B.
                                                                              Hominidae; Homo.
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Best Local Similarity
Matches 2271; Conserv
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99.7%;
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77	CACGCGGTCGCCCCTTTGTAACAAAACGAAAGAGTCTAAGCATTGCCACTTTAGCTG 2277	2221	Q
2284	CTCCTCTCTTCTGGGTCATGCAAAGCAGATCTTGGTTGCCGCAGCTACACTGATGAACTC	2225	뮍
2220	CTCCTCTCTTGGGTCATGCAAAGCAGATCTTGGTTGCCGCAGCTACACTGATGAACTC	2161	8
2224	GAGAGCGTGTCCTCCTCTTCAGGCCTGGGTGAGGAGGAACCTCCTGCCCTTCCTT	2165	<b>B</b>
2160	GAGAGCGTGTCCTCCTCTTCAGGCCTGGGTGAGGAAGCAACCTCCTGCCCTTCCTT	2101	S
2164	CTGTCTCTGCCACTGATGGAAGGACTCTCTGACGGACCAGAAAACGTCTTCCCTGACG	2105	뮍
2100	CTGTCTCTGCCACTGATGGAAGGACTCTCCGACGGACAGAACAGAAACGTCTTCCCTGACG	2041	δ
2104	AGCCCCTCGGACATGCCGCGGGACTCAGGCATCTATGACTCGTCTGTGCCCTCATCCGAG	2045	망
2040	AGCCCCTCGGACATGCCGCGGGACTCAGGCATCTATGACTCGTCTGTGCCCTCATCCGAG	1981	γQ
2044	CGGCCTGCCCTTGACGGTAGCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGC	1985	망
1980	CGGCCTGCCCTTGACGGTAGCGCCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGC	1921	δ
1984	GGACCAGCCGACTCCCAGCACGAGAGTCAGCATGGGGGCCTGGACCAAGACGGGGAGGCC	1925	망
1920	GGACCAGCCGACTCCCAGCACGAGAGTCAGCATGGGGGCCTGGACCAAGACGGGGAGGCC	1861	ঠ
1924	AAACCAGGGCCTGAGAGTGACTTCTGCCTAAAGGTAGAGGCGGCTGTTCTTGGGGCAACC	1865	망
1860	AAACCAGGGCCTGAGAGTGACTTCTGCCTAAAGGTAGAGGCGCCTGTTCTTGGGGCAACC	1801	Ş
1864	TACCGGGAGCCAGTCTTGGAGAAATTTGATTCGGGCTTGGTTTTAAATGATGTCATGTGC	1805	ф

Search completed: March 1, 2006, 10:14:25 Job time : 14967 secs THIS PAGE BLANK (USPTO)

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Database :
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Perfect score:
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Copyright (c) 1993 - 2006 Biocceleration Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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15.2 14.7 13.9 13.8	15.0 15.0 15.6 15.3	50.0 49.1 33.5 24.9 23.8 119.7 118.8 17.1	Query Match
754 462 649 692	629 629 6494 748	1677 1677 1674 908 856 851 724 679	Query Match Length 74.8 2406
58271	722877	100 100 100 100	10
AU124473 CN302483 BB616055 DN432360 BU221978	CN302484 CJ024557 DR003317 BE750478 BB641245 CV126214	AY408489 AY408490 AY408491 CJ025168 DN282586 DN283973 BP154750 BP275471 BW965550 DN391145	ID HSM805220
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AU124473 CN302483 BB616055 DN432360 BU221978	CV126214	AY408489 AY408491 AY408491 CJ025168 DN282586 DN283973 BP154750 BP275741 BW965550 DN391145	Description
	170005314 CJ024557 TC100455 201867 MA BB641245 AGENCOURT	19 Homo Bapi 10 Pan trogl 11 Mus muscu 1182679 M 1184215 M 189154750 189275741 189965550	Homo sapi

## ALIGNMENTS

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CDS	gene	•		,		•		source	FEATURES							COMMENT		JOURNAL	TITLE	CONSRIM	AUTHORS	REFERENCE		ORGANISM	SOURCE	VERSION	ACCESSION	DEFINITION	LOCUS	RESULT 1
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Query Match
Best Local Similarity
Matches 2313; Conserv
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milarity 99.6%;
Conservative
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PUBMED 14671302  REFERENCE 2 (bases 1 to 1677)  AUTHORS Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.  TITLE Direct Submission  JOURNAL Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA  COMMENT This sequence was made by sequencing genomic exons and ordering them based on alignment.  FEATURES Location/Qualifiers  1.1677  //mol_type="genomic DNA" //db_xref="taxon:9606"	AY408489 AY408489 N Homo sapiens HCM3241 gene, VIR genomic survey sequence. AY408489 AY408489.1 GI:39764460 GSS. Homo sapiens (human) Homo sapiens Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Euarchonto Hominidae; Homo. 1 (bases 1 to 1677) 1 (bases 1 to 1677) Clark, A.G., Glanowski, S., Niel Todd, M.A., Tanenbaum, D.M., Civ Perriera, S., Wang, G., Zheng, X.; Adams; M.D. and Cargill, M. Inferring nonneutral evolution gene trios	Db 1827 CGGTAGCGCCCTGCAACCCCTGCTGCACACGGTGAAAGCCGGCAGCCCCTCCGACAT 1886  Qy 1995 GCCGCGGGACTCAGGCATCTATGACTCGTCTGTGCCCTCATCCGAGCTGTCTCTGCCACT 2054
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Pan troglodytes HCM3241 gene, V genomic survey sequence.

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1 (bases 1 to 1677)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
Clark, A.G., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
                                                                                                                              Pan troglodytes (chimpanzee)
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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Best Local Similarity
Matches 1652; Conserv
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
Adams, M.D. and Cargill, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rockville, MD 20850, USA This sequence was made by
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Submitted (16-NOV-2003) Celera
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Science 30
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Inferring nonneutral evolution from human-chimp-mouse
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                             ANAGATGGCCAGAATCACATGAATGTCGTCCAGTGTTTCGCCTACTTCCTCCAGGACTTC 1173
                                                                        GCAGCACTCCCAAGAGAGAGCTCCCGGCCGGCCGAAGGTCTTTCTCTGCTATTCCAGT 1113
                                                                                                                               CAACAAGAAAATATATATTCACATTTAGATGAAGAGAGCTCTGAGTCTTCCACATACACT
                                                                                                                                                                                      GTGCCACTGGTAGTCATATCGGCATTCGCGACGCTCTTCACTGTGATGTGCCGCAAGAAG
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                                                                                                                 CAACAAGAAATATATTCACATTTAGATGAAGAGAGCTCTGAGTCTTCCACATACACT
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Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:9598"
<1. .>1677
/locus_tag="HCM3241"
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Pred. No. 0;
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OY 754 ARGACCTETRAGCAGGAGCAAACTACGACGACCAGCTGCCTCCTTCAAAATGTTTCT Db 256 AGGACTTGCAGGCAGNNN Oy 814 CCAGGGGATTATATAATTGAGCTGGTGGATGACACCAACAAGAAAAGTGATGCAT	1570 GAGGAACCTCCTGCCCTTCCAAGCTCCTCTTCTGGGTCATGCAAAGCAGATCTT 1629 2194 GGTTGCCGCAGCTACACTGATGAACTCCCACGCGGTCGCCCCTTTGTAA 2241
694 TTCGG       196 TTCGG	2074 GACCAGACAGACTCTTCCCTGACGGAGAGCGTGTCCTCCTCTTCAGGCCTGAGG 2133
634 CTGAA        136 CTGAA	2014 TATGACTCGTCTGTGCCCTCATCCGAGCTGTCTCTGCCACTGATGGAAGGACTCTCGACG 2073
Qy 574 TGTGACCTGTTGTTACAGCCGGACAATCTAGCTTGTAAACCCTTCTGGAAGCCTCGGAAC	1954 CCCCTGCTGCACACGGTGAAAGCCGGCAGCCCCTCGGACATGCCGCGGGACTCAGGCATC 2013
Qy 514 CCTTTCCTTCCATTAAAAACGAAAGCAATTACCACCCTTTCTTCTTTAGAACCCGAGCC	1894 GGGGGCCTGGACCAAGACGGGGAGGCCGGCCTTGACGGTAGCGCCGCCCTGCAA 1953 
454 ATGGAATCTCAACCTTTC	1834 GTAGAGGCGCCTGTTCTTGGGGCAACCGGACCAGCCGACTCCCAGCACGAGAGTCAGCAT 1893
Query Match Best Local Similarity 75.8%; Score 1032.2; DB 10; Length 1674; Matches 1360; Conservative 0; Mismatches 308; Indels 126;	1774 GGCTTGGTTTTAAATGATGTCATGTGCAAACCAGGGCCTGAGAGTGACTTCTGCCTAAAG 1833
/db_xréf="taxon:10090"  gene <1>1674	1714 GTTCCCTTCCATCCTCCACTGCGCTACCGGGAGCCAGTCTTGGAGAAATTTGATTCG 1773
	1654 GCCATTTGCAACATGCACCAGTTTATTGACGAGGAGCCCGACTGGTTCGAAAAGCAGTTC 1713
JOURNAL Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA COMMENT This sequence was made by sequencing genomic exons and ordering them based on alignment.	1594 ACGCGACAGGGCAGAAGGAACTACTTCCGGAGCAAGTCAGGCCGGTCCCTATACGTC 1653
Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J., Adams,M.D. and Cargill,M.  TITLE Direct Submission	1534 CCTCAGCTCTGTTCCCACCTGCACTCCCGAGACCACGGCCTCCAGGAGCCGGGGCAGCAC 1593
JOURNAL Science 302 (5652), 1960-1963 (2003) PUBMED 14671302 REFERENCE 2 (bases 1 to 1674) AUTHORS Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejari	1474 GAGGGAGACGTCCCCGGTATCCTAGACCTGAGTACCAAGTACAGACTCATGGACAATCTT 1533
Adams,M.D. and Cargill,M.  TITLE Inferring nonneutral evolution from human-chimp-mouse orthologous gene trios	
REFERENCE 1 (bases 1 to 1674) AUTHORS Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A. Toddi, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,	GGGAAAGGAGATCTTCCTGGTGGCAGCAGTGTCAGCCATTGCCGAAAAGCTCCGCCAGGCC
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Buarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Mus.	730 GETATGAAGTACTTTGTGGACNANAAGAACTACAAAGGACGTGGCCGAGGCTCG 789  1354 GGGAAAGGAGAGCTCTTCCTGGTGGCGGTGTCAGCCATTGCCGAAAAGCTCCGCCAGGCC 1413
SOURCE Mis musculus (house mouse) ORGANISM Mus musculus	GGTATGAAGTACTTTGTGGACAAGAAGAACTACAAACACAAAGGAGGTGGCCGAGGCTCG
genomic survey sequence.  N AY408491  AY408491.1 GI:39764462	1234 AGAGAATGGGTCATCCAGAAGATCCACGAGTTCCAGTTCATCATTGTGGTTTGTTCCAAA 1293
RESULT 4  AY408491 AY	1174 TGTGGCTGTGAGGTGGCTCTGGACCTGTGGGAAGACTTCAGCCTCTGTAGAGAAAGGGCAG 1233
Db 1630 GGTTGCCGCAGCTACAATGATGAACTCCACGCGGTCGCCCCTTTGTAA 1677	

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lenbaum,D.M., Civello,D.R., Lu,F., Murphy,B.,
lang,G., Zheng,X.H., White,T.J., Sninsky,J.J.,
[Cargill,M.]
                                                                                                                      s_tag="HCM3241"
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eria; Euarchontoglires; Glires; Rodentia;
Murcidea; Muridae; Murinae; Mus.
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CM3241 gene, VIRTUAL TRANSCRIPT, partial sequence, sequence.
                                                                                                                                                                           nism="Mus musculus"
type="genomic DNA"
ref="taxon:10090"
                                                                                                                                                                                                                                                                                                                     NOV-2003) Celera Genomics, 45 West Gude Drive,
20850, USA
was made by sequencing genomic exons and ordering
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Score 1032.2; DB 10; Length 1674; Pred. No. 3.3e-259; 0; Mismatches 308; Indels 126; Gaps
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CAGCATGGGGGCCTGGACCAAGACGGGGAGGCCCGGCCTTGACGGTAGCGCCGCC
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PEDS (Pig EST Data Explorer): construction of a derived from porcine full-length cDNA libraries Nucleic Acids Res. 32 (1), D484-D488 (2004)
                                                                                                                                                                                                                                                                             Email: huenishi@affrc.go.jp

EST project with full-length enriched cDNA libraries carried
Animal Genome Research Program (Japan) by National Institute
Agrobiological Sciences and STAFF-Institute
Single pass sequencing of clones derived from oligo-capped cl
                                                                                                                                                                                                                                                                                                                                                                        Animal Genome Laboratory, Genome Research Department National Institute of Agrobiological Sciences 2 Ikenodai, Tsukuba, Ibaraki 305-8602, Japan Tel: +81-29-838-8627
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                               /tissue_type="trachea"
/dev_stage="adult"
/clone_lib="full-length
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/db_xref="taxon:9823"
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Bos taurus
Social Substance
Bos taurus
Bos taurus
Bos taurus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Cetartiodactyla; Ruminantia;
Peccora; Boyidae; Boyinae; Bos.
1 (bases 1 (bases 1 o 856)
Smith, T. P. L. Roberts, A. J., Echternkamp, S. E., Chitko-McKown, C.G.,
Wray, J. B. and Keele, J. W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called with phred v0.020425.c and
trimmed with the aid of the trim_alt option. Vector identified with
cross_match v0.990329.
Plate: RLKB015 row: B column: 19
Seq_primer: TAGAAGGCAAGGTCGAGG.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: 402 762 4366
Fax: 402 762 4390
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PO Box 166, Clay Center, NE 68933-0166, USA
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TCTGGAAGCCTCGGAACCTGAACATCAGCCAGGATGGCTCGGACATGCAGGTGTCCTTCG
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                                                                       TCTTTAGAACCCGAGCCTGTGACCTGTTGTTACAGCCGGACAATCTAGCTTGTAAACCCT
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/mol type="mRNA"
/db_xref="taxon:9913"
/tissue_type="pooled"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="Vector: pcDNA3.1; Site 1: EcoRI; Site 2: NotI; Library made with RNA pooled from multiple tissues including ovary, hindbrain, uterus, and day-30 whole embryos."
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1184215 MARC 7BOV Bos taurus
DN283973 DN283973.1 GI:60452583
EST.
                                                                                                                                                                                                                                              Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called
trimmed with the aid of the trim_alt
cross_match v0.990329.
Plate: RLK8015 row: E column: 19
Seq primer: GTAATACGACTCACTATAGGG.
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A second set of bovine ESTs from pooled-tissue Unpublished (2003)
Contact: Smith TPL
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Bos taurus
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PO Box 166, Clay Center, N
Tel: 402 762 4366
Fax: 402 762 4390
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1 (bases 1 to 851)
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               Conservative
                                                                                     including
                                                                                            /clone_lib="MARC 7BOV"
/note="Vector: pcDNA3.1; Site_1: EcoRI; Site_2: No
/note="Vector: pcDNA3.1; Site_1: EcoRI; Site_2: No
Library made with RNA pooled from multiple tissues
including ovary, hindbrain, uterus, and day-30 who
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/mol_type="mRNA"
/db_xref="taxon:9913"
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                                                                                                                                                  /tissue_type="pooled"
/lab_host="DH108"
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Sus scrofa (pig)
Sus scrofa
Eukaryota; Metazoa; (
Mammalia; Eutheria; )
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                                                    BP154750 mBP154750 full-length enriched swine scrofa cDNA clone OVRM10115H10 5', mBP154750 BP154750.1 GI:40404223 EST.
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1 (bases 1 to 724)

1 (bases 1 to 724)

Uenishi, H., Eguchi, T., Suzuki, K., Sawazaki, T., T.

Okumura, N., Hamasina, N. and Awata, T.

PEDE (Pig EST Data Explorer): construction of a
derived from porcine full-length cDNA libraries

Nucleic Acids Res. 32 (1), D484-D488 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pax: +81-29-838-8627
Email: huenishi@affrc.go.jp
Email: huenishi@affrc.go.jp
EST project with full-length enriched cDNA libraries carried out
Animal Genome Research Program (Japan) by National Institute of
Agrobiological Sciences and STAFF-Institute
Single pass sequencing of clones derived from oligo-capped cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Animal Genome Laboratory, Genome Research Department National Institute of Agrobiological Sciences 2 Ikenodai, Tsukuba, Ibaraki 305-8602, Japan Tel: +81-29-838-8627
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                                                                                                                                                                                                                                                                                                                                                 GGCTGGGCGAGCGCACGGCCATGGCCCCGTGGCTGCAGCTCTGCTCCTCTTTACGG
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TACTGGAGGAGCTGAAGTCAGAAGGAAGACAGTGCCAACAACTGATTCTGAAGGACCCGA
                                                                                                                        TACTGGAGGAGCTGAAGTCGGAGGGAAGAAGAGTGCCAACAACTGATTCTAAAGGATCCGA
                                                                                                                                                                   TCACCATTCTCTGGTCCCCAGGGGCCCTCGGCATCGAATTCCTAAAAGGATTTCGGGTAA
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Location/Qualifiers
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/dev_stage="adult"
/clone_lib="full-length
ovary"
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/db_xref="taxon:9823"
/clone="OVRM10115H10"
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Pred. No. 5.6e-148;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, Uni
4-6-1, Shirokanedal, Minatoku, To
Email: ysuzuki@ims.u-tokyo.ac.jp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hominidae; Homo.

1 (bases 1 to 583)

Suzuki,Y., Yamashita,R., Shirota,M., Sakakibara,Y., Chiba,J.

Mizushima-Sugano,J., Nakai,K. and Sugano,S.

Sequence comparison of human and mouse genes reveals a homol block structure in the promoter regions

Genome Res. 14 (9), 1711-1718 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                AGTCTTGGAGAAATTTGATTCGGGCTTGGTTTTAAATGATGTCATGTGCAAACCAGGGCC 1811
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AGTCTTGGAGAAATTTGATTCGGGCTTGGTTTTAAATGATGTCATGTGCAAACCAGGGCC
                                                            CGACTGGTTCGAAAAGCAGTTCGTTCCCTTCCATCCTCCACTGCGCTACCGGGAGCC
                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="kidney"
/clone_Tib="Sugano cDNA library, kidney"
                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="KDN04362"
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Minatoku, Tokyo 108-8639, Jap
                                                                                                                                                                                                                                                                                                                Score 578.8; DB 3;
Pred. No. 3.2e-140;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                          Animal Genome Laboratory, Genome Research Department
National Institute of Agrobiological Sciences
2 Ikenodai, Tsukuba, Ibaraki 305-8602, Japan
Tel: +81-29-838-8627
Fax: +81-29-838-8627
Email: huenishi@aftrc.go.jp
EST project with full-length enriched cDNA libraries carried out
Animal Genome Research Program (Japan) by National Institute of
Agrobiological Sciences and STAFF-Institute
Single pass sequencing of clones derived from oligo-capped cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Uenishi,H., Eguchi,T., Suzuki,K., Sawazaki,T., Toki,D., S
Okumura,N., Hamasima,N. and Awata,T.
PEDE (Pig EST Data Explorer): construction of a database
derived from porcine full-length cDNA libraries
Nucleic Acids Res. 32 (1), D484-D488 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EW965550 full-length enriched swine cDNA library, scrofa cDNA clone OVR010067A07 5', mRNA sequence.
                                                                                                                                                                                                                    Vector sequences were eliminated by RepeatMasker version 2002/07/13 and crossmatch version 0.990319

Low quality bases were trimmed based on the quality values.

Location/Qualifiers
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Sus scrofa (pig)
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BW965550.1
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Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;
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               Conservative
                                                                                     /tissue_type="ovary"
/dev_stage="adult"
/clone_lib="full-length
ovary"
                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:9823"
/clone="OVR010067A07"
                                                                                                                                                                                                          1. .679
                                                                                                                                                                                          organism="Sus scrofa"
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                           18.5%;
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             Score 570.4; DB Pred. No. 5.3e-130; Mismatches
                        *; DB 5;
3.3e-138;
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e cDNA library,
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LIB3925-001-Q1-K1-B10 LIB3925
CLM8802925, mRNA sequence.
DN391145
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                                                                         Contact: Nick Staten
Tel: 636 247 6855
                                                                                                    Direct Submission (Staten, Unpublished (2005)
                                                                                                                                Staten, N.R.
                                                                                                                                                                            Eukaryota;
Mammalia; I
                                                                                                                                                                                                       Canis familiaris (dog)
Canis familiaris
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EST.
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                                                                                                                                             (bases 1 to 609)
                                                        nicholas.r.staten@pfizer.com.
                            1. .609
                                          Location/Qualifiers
                                                                                                                                                                            ; Metazoa;
Butheria;
mol_type="mRNA"
             organism="Canis
                                                                                                                                                                                                                                                                                                                                                                                                                 669
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                                                                                                                                                                                                                                                     GI:60572366
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                  familiaris"
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s familiaris cDNA
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         Brandenberger,R., Wei,H., Zhang,S., Lei,S., Murage,J., Pisk,G.
Li,Y., Xu,C., Pang,R., Guegler,K., Rao,M.S., Mandalam,R.,
Lebkowski,J and Stanton,L.W.
Transcriptome characterization elucidates signaling networks t
                                                                                                     Homo sapiens (human)
                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                     Hominidae; Homo.
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                                                        (bases 1 to 629)
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ilarity 93.2%;
Conservative
human ES cell growth and differentiation
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/db xref="taxon:9615"
/clone="CLN8802925"
/tissue_type="heart"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone_lib="LIB3925"
/note="Vector: pSPORT1;
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RESULT 13
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Best Local Sim
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CJ024557
803 bp mRNA linear CJ024557 full-length enriched swine cDNA library, scrofa cDNA clone TCH01A100029 5', mRNA sequence.
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230 Constitution Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nat. Biotechnol. 22 (6),
15146197
Contact: Brandenberger R
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Fax: 650 473 7760
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Length: 629 Std Error:
Location/Qualifiers
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/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone_lib="GRN_ES"
/note="oligo dT primed, full-length enriched cDNA library
/note="oligo dT primed, full-length enriched cDNA library
from undifferentiated hES cell lines H1 (p32), H7 (p29),
and H9 (p26) maintained in feeder-free conditions"
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Pred. No. 1e-125;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Uenishi,H., Eguchi,T., Suzuki,K., Sawazaki,T., Tokumura,N., Hamasima,N. and Awata,T.
PEDE (Pig EST Data Explorer): construction of a derived from porcine full-length cDNA libraries Nucleic Acids Res. 32 (1), D484-D488 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: huenishi@affrc.go.jp
EST project with full-length enriched cDNA libraries carried
Animal Genome Research Program (Japan) by National Institute
Agrobiological Sciences and STAFF-Institute
Single pass sequencing of clones derived from oligo-capped cl
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Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;
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TACTGGAGGAGCTGAAGTCAGAAGGAAGAAGACAACTGATTCTGAAGGACCCGA
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                                   TACTGGAGGAGCTGAAGTCGGAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGA
                                                                                                            TCACCATTCTTTGGTCCCCAGGGGCCCTCGGCATCGAAATTCCTGAAAGGATTTCGGGTAA
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quality bases were trimmed based on the quality values.
Location/Qualifiers
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/mol_type="mRNA"
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/clone="TCH01A100029"
/tissue_type="trachea"
                                                                      CTCTGGTCCCCAGGGGCCCTCGGCATCGAATTCCTAAAAGGATTTCGGGTAA
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/clone_lib="full-length enriched swine cDNA library, adult
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Pred. No. 2e-118;
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Contact: Kovacs, KF
High Throughput cDNA Cloning
OriGene Technologies, Inc. ( www.origene.com )
OriGene Technologies, Inc. ( www.origene.com )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OriGene Technologies, Inc. ( www.origene.com )
6 Taft Court, Suite 100, Rockville, MD 20850, USA
Tel: 301 340 3188
Fax: 301 340 8606
Email: cDNA@origene.com
This EST submission is part of an on-going human full-length
cloning project at OriGene Technologies, Inc.
Please contact OriGene for access.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hominidae; Homo.

1 (bases 1 to 494)

Birkett,C., Cho,J., Gau,Y., Hamer,R., Kelly,S., Kovacs,K., Liu,L.
Birkett,C., Cho,J., Sachs,A., Shu,Y., Sun,Z., Wong,J., Wu,M.,
Liu,X., Porter,J., Sachs,A., Shu,Y., Sun,Z., Wong,J., Wu,M.,
Zhang,X., Jay,G. and He,W.
High-throughput cloning of full-length human cDNAs directly from cDNA libraries optimized for large and rare transcripts
Unpublished (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DR003317

494 bp mRNA linear BST 17
TC100455 Human fetal brain, large insert, pCMV expression
Homo sapiens cDNA clone TC100455 5' similar to Homo sapien
interleukin 17 receptor D (IL17RD), mRNA sequence.
DR003317

DR003317
                                                                                                                                                                                                                                                                                                                                                                           http://www.origene.com
Seq primer: pCMV6 5prime forward vector primer,
Technologies Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                           OriGene Technologies, Inc.
6 Taft Ct. Suite 100
Rockville, MD 20850
Tel: (301) 340-3188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                                                                                                                                                       /tissue type="Fetal Brain"
/clone_Tib="Human fetal brain, large insert,
expression library"
                ligation for large inserts into mammalian expression vector, random clones selected for end sequence verification of full-length genes"
                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="TC100455"
                                                                                                                                                                                                                                                                                                                                                      ocation/Qualifiers
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Query Match Best Local Similarity Matches 490; Conserv

15.9%; Score 490; DB 8; Lilarity 100.0%; Pred. No. 6.4e-117; Conservative 0; Mismatches 0;

Length 494;

0,

Gaps

0;

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REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
BE750478
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ACCESSION
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                                                                                                                                                                                                                                             1 (bases 1 to 547)

1 (bases 1 to 547)

Smith, T.P.L., Grosse, W.M., Freking, B.A., Roberts, A.J., Stone, R.T., Casas, E., Wray, J.E., White, J., Cho, J., Fahrenkrug, S.C., Bennett, G.L., Heaton, M.P., Laegreid, W.W., Robrer, G.A., Chitko-McKown, C.G., Pertea, G., Holt, I., Karamycheva, S., Liang, F., Quackenbush, J. and Keele, J.W.

Sequence evaluation of four pooled-tissue normalized bovine cDNA libraries and construction of a gene index for cattle Genome Res. 11 (4), 626-630 (2001)
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201867 MARC 4BOV Bos taurus
BE750478
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                                                              Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called and alt trimmed with phred
v0.980904.e. Vector identified by cross_match with the -minscore
and _minmatch 12 options.
                                                                                                                                                                                                                                                                                                                                                                                                            Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla;
Pecora; Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BE750478.1
FORWARD: AGGAAACAGCTATGACCAT
BACKWARD: GTTTTCCCAGTCACGACG
Plate: 112 row: C column: 10
                                                                                                                                          USDA, ARS, US Meat Animal Research Center
PO Box 166, Clay Center, NE 68933-0166, USA
Tel: 402 762 4366
Pax: 402 762 4390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bos taurus (cow)
                                                     PCR PRimers
                                                                                                                                                                                                              Contact: Smith TPL
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Location/Qualifiers
                                                            GCTCAACAGTAGCTTCAAAAGAACTGGAATGGAATCTCAACCTTTCCTGAATATGAAATT
                                                                                                                                                                           GGAGGAGCTGAAGTCGGAGGGAAGACAGTGCCAACAACTGATTCTAAAGGATCCGAAGCA 425
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TCACCCT
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                                                                                                                                                                                                  CATTCTTTGGTCCCCCGGGGCCCTCGGCATCGAATTCCTAAAAGGATTTCGGGTCATACT
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                                                TGAAACAGATTACTTTGTAAAGATCGTCCCTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone lib="MARC 4BOV"
/note="Vector: pCMV SPORT6; Site 1: NotI; Site 2: SalI;
Library made from pooled tissue from day 20 and day 40 embryos."
547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/db_xref="taxon:9913"
/tissue_type="pooled"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Bos taurus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15.6%;
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Pred. No. 3.2e-114;
0; Mismatches 42;
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